Color Television **Chassis**

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Service
Service
Service



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Service Manual

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1. Technical Specifications, Connections, and Chassis Overview

Index of this chapter:

1.1 Technical Specifications
1.2 Connections
1.3 Chassis Overview

Notes:

- Figures can deviate due to the different set executions.
- Specifications are indicative (subject to change).

1.1 Technical Specifications

1.1.1 Vision

Display type	:	LCD
Screen size	:	42" (107 cm), 16:9
	:	47" (120 cm), 16:9
	:	52" (132 cm), 16:9
Resolution (H × V pixels)	:	1920(× 3) × 1080
Light output (cd/m^2)	:	500
Viewing angle (H × V degrees)	:	176 × 176
Tuning system	:	PLL
Color systems	:	ATSC
	:	NTSC
Video playback	:	NTSC
Cable	:	Unscrambled digital cable - QAM
Tuner bands	:	UHF, VHF, S, Hyper
Supported video formats		
- All sets	:	480i @ 60 Hz
	:	480p @ 60 Hz
	:	720p @ 60 Hz
	:	1080i @ 60 Hz
	:	1080p @ 60 Hz
- 47PFL9732D/37+52”	:	576i @ 50 Hz
	:	576p @ 50 Hz
	:	720p @ 50 Hz
	:	1080i @ 50 Hz
	:	1080p @ 24,25,50 Hz
Supported computer formats		
- All sets	:	640 × 480 @ 60 Hz
	:	800 × 600 @ 60 Hz
	:	1024 × 768 @ 60 Hz
	:	1366 × 768 @ 60 Hz
- 47PFL9732D/37+52”	:	1280 × 1024 @ 60 Hz
	:	1920 × 1080i @ 60 Hz
	:	1920 × 1080p @ 60 Hz

1.1.2 Sound

Maximum power (W_{RMS})	:	2 × 8

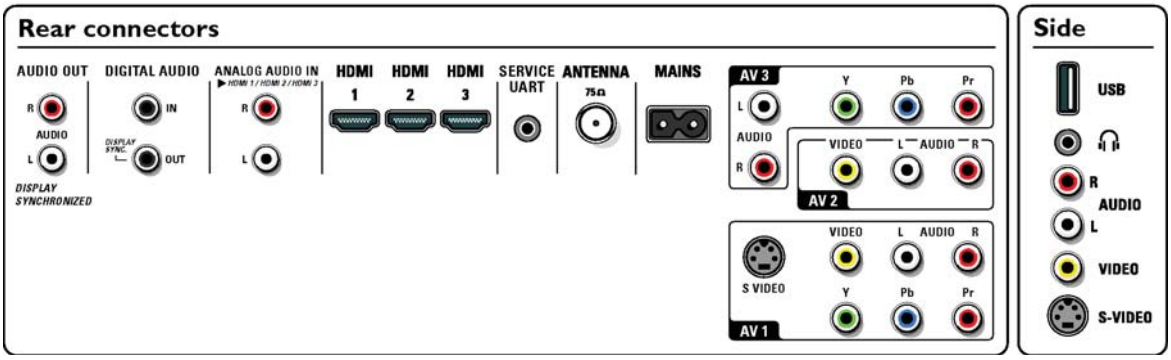
1.1.3 Multimedia

Supported file formats	:	JPEG
	:	MP3
	:	Slideshow (.alb)
USB input	:	USB2.0

1.1.4 Miscellaneous

Power supply:		
- Mains voltage (V_{AC})	:	110 - 240 ±10% (4xPFL7422D/37 and 47PFL5432D/37)
	:	110 ±10% (4xPFL7432D/37,
	:	47PFL9732D/37 and 52”)
- Mains frequency (Hz)	:	50 / 60
Ambient conditions:		
- Temperature range (°C)	:	+5 to +45
Power consumption (values are indicative)		
- Normal operation (W)	:	226 (42")
	:	295 (47", all sets)
	:	310 (47PFL9732D/37 and 52")
- Stand-by (W)	:	< 1
Dimensions (W × H × D) (inch)	:	42.1 × 27 × 4.6 (42")
	:	45.6 × 29.6 × 4.6 (47")
	:	49.2 × 27.1 × 4.4 (47PFL5432D/37)
	:	50.8 × 32.9 × 4.6 (52")
Weight (lb.)		
- 42PFL7422D/37	:	58.2
- 42PFL7432D/37	:	60.8
- 47PFL7422D/37	:	67.5
- 47PFL7432D/37	:	69.7
- 47PFL5432D/37	:	67.5
- 47PFL9732D/37	:	70.5
- 52PFL7422D/37	:	87.1
- 52PFL7432D/37	:	89.5
- 52MF437B/37	:	87.1
- 52MF437S/37	:	87.1

1.2 Connections



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Figure 1-1 Connection overview

Note: The following connector color abbreviations are used (acc. to DIN/IEC 757): Bk = Black, Bu = Blue, Gn = Green, Gy = Grey, Rd = Red, Wh = White, Ye = Yellow.

1.2.1 Side Connections

USB2.0



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Figure 1-2 USB (type A)

1	- +5V		
2	- Data (-)		
3	- Data (+)		
4	- Ground	Gnd	

Head phone (Output)

Bk	- Head phone	32 - 600 ohm / 10 mW	

Cinch: Video CVBS - In, Audio - In

Rd	- Audio R	0.5 V_{RMS} / 10 kohm	
Wh	- Audio L	0.5 V_{RMS} / 10 kohm	
Ye	- Video CVBS	1 V_{PP} / 75 ohm	

S-Video (Hosiden): Video Y/C - In

1	- Ground Y	Gnd	
2	- Ground C	Gnd	
3	- Video Y	1 V_{PP} / 75 ohm	
4	- Video C	0.3 V_{PP} / 75 ohm	

1.2.2 Rear Connections

Cinch: Audio - Out

Rd	- Audio - R	0.5 V_{RMS} / 10 kohm	
Wh	- Audio - L	0.5 V_{RMS} / 10 kohm	

Digital Audio In: Cinch: S/PDIF - In

Bk	- Coaxial	0.2 - 0.6V_{PP} / 75 ohm	

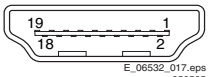
Digital Audio Out: Cinch: S/PDIF - Out

Bk	- Coaxial	0.4 - 0.6V_{PP} / 75 ohm	

Cinch: Audio - In

Rd	- Audio - R	0.5 V_{RMS} / 10 kohm	
Wh	- Audio - L	0.5 V_{RMS} / 10 kohm	

HDMI 1, 2 & 3: Digital Video, Digital Audio - In



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Figure 1-3 HDMI (type A) connector

1	- D2+	Data channel	
2	- Shield	Gnd	
3	- D2-	Data channel	
4	- D1+	Data channel	
5	- Shield	Gnd	
6	- D1-	Data channel	
7	- D0+	Data channel	
8	- Shield	Gnd	
9	- D0-	Data channel	
10	- CLK+	Data channel	
11	- Shield	Gnd	
12	- CLK-	Data channel	
13	- n.c.		
14	- n.c.		
15	- DDC_SCL	DDC clock	
16	- DDC_SDA	DDC data	
17	- Ground	Gnd	
18	- +5V		
19	- HPD	Hot Plug Detect	
20	- Ground	Gnd	

Service Connector (UART)

1	- Ground	Gnd	
2	- UART_TX	Transmit	
3	- UART_RX	Receive	

Aerial - In

-	- F-type (US)	Coax, 75 ohm	

AV3: Cinch: Audio - In

Rd	- Audio - R	0.5 V_{RMS} / 10 kohm	
Wh	- Audio - L	0.5 V_{RMS} / 10 kohm	

AV3: Cinch: Video YPbPr - In

Gn	- Video Y	1 V_{PP} / 75 ohm	
Bu	- Video Pb	0.7 V_{PP} / 75 ohm	
Rd	- Video Pr	0.7 V_{PP} / 75 ohm	

AV2: Cinch: Video CVBS - In, Audio - In

Rd - Audio R	0.5 V_{RMS} / 10 kohm	
Wh - Audio L	0.5 V_{RMS} / 10 kohm	
Ye - Video CVBS	1 V_{PP} / 75 ohm	

AV1: S-Video (Hosiden): Video Y/C - In

1 - Ground Y	Gnd	
2 - Ground C	Gnd	
3 - Video Y	1 V_{PP} / 75 ohm	
4 - Video C	0.3 V_{PP} / 75 ohm	

AV1: Cinch: Video CVBS - In, Audio - In

Rd - Audio R	0.5 V_{RMS} / 10 kohm	
Wh - Audio L	0.5 V_{RMS} / 10 kohm	
Ye - Video CVBS	1 V_{PP} / 75 ohm	

AV1: Cinch: Video YPbPr - In

Gn - Video Y	1 V_{PP} / 75 ohm	
Bu - Video Pb	0.7 V_{PP} / 75 ohm	
Rd - Video Pr	0.7 V_{PP} / 75 ohm	

1.3 Chassis Overview

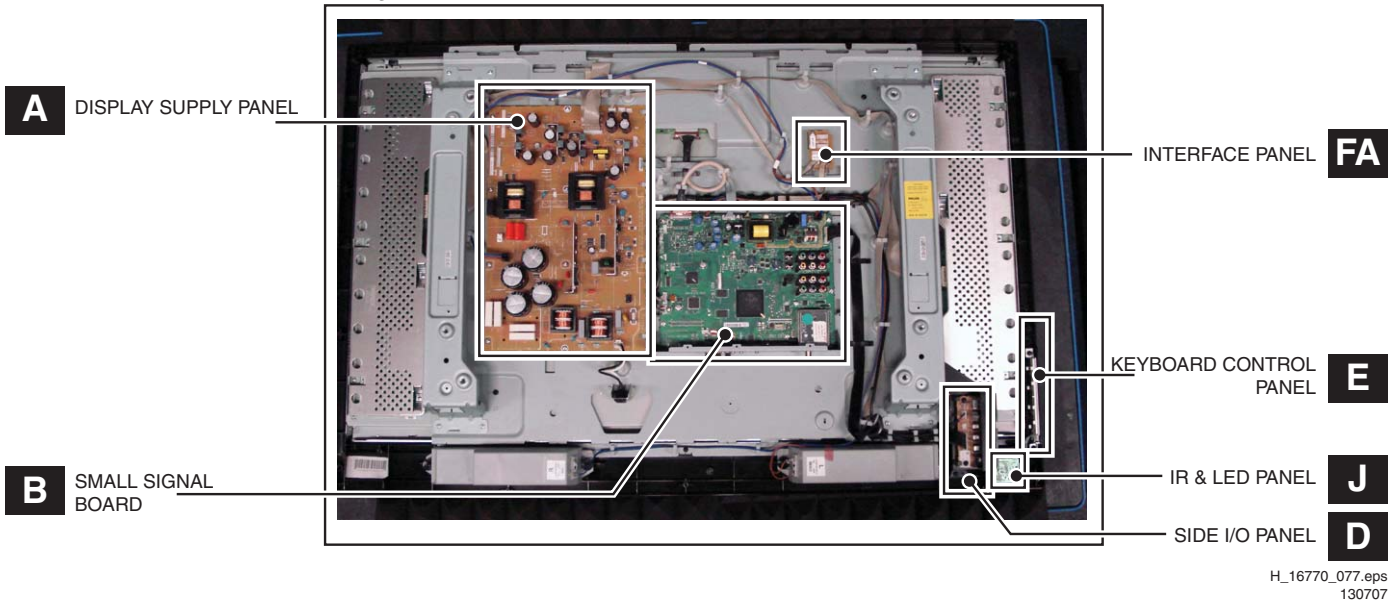


Figure 1-4 PWB/CBA locations 42" sets (with AmbiLight)

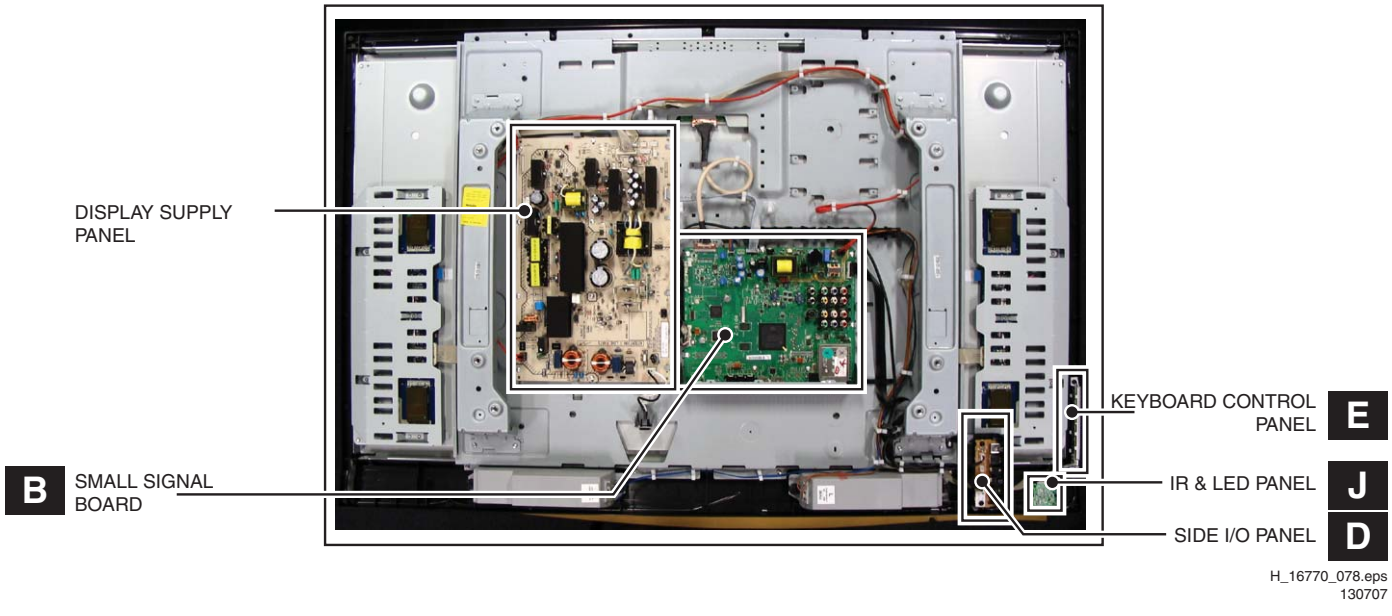


Figure 1-5 PWB/CBA locations 47" sets (all sets without DFI panel) and 42" sets (without Ambilight)

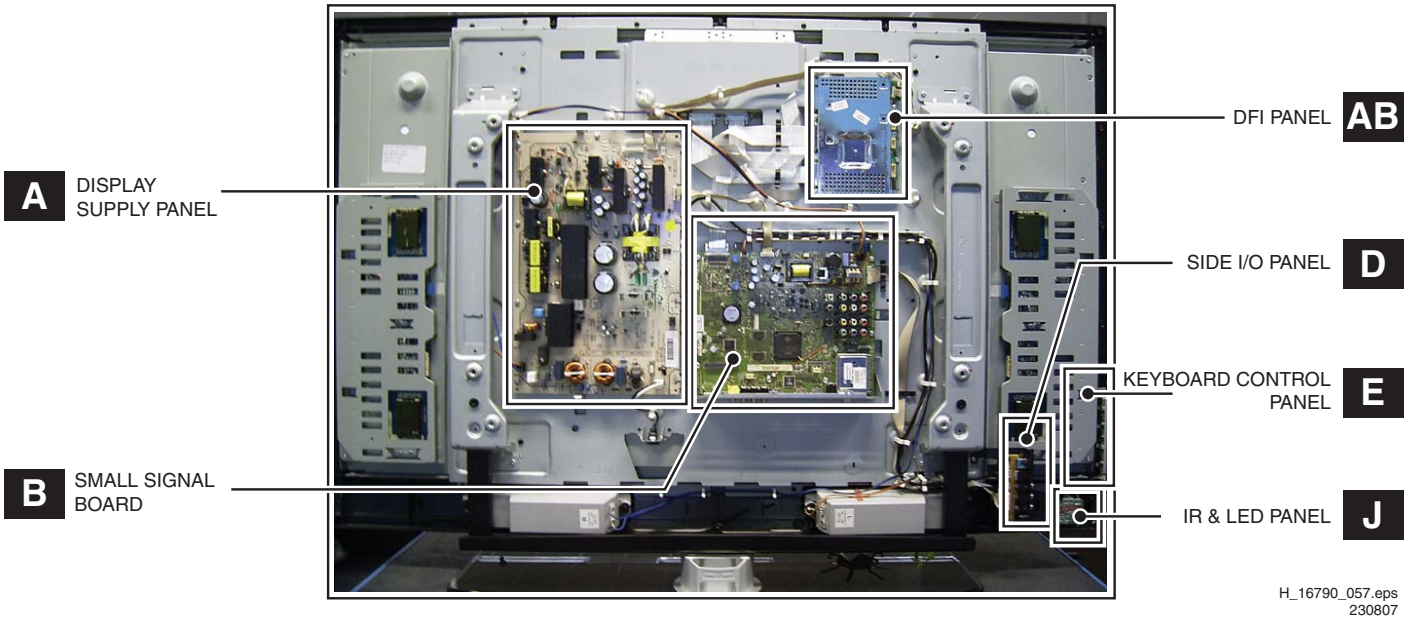


Figure 1-6 PWB/CBA locations 47 and 52" sets (optional with DFI panel)

2. Safety Instructions, Warnings, and Notes

Index of this chapter:

2.1 Safety Instructions
2.2 Warnings
2.3 Notes

2.1 Safety Instructions

Safety regulations require the following **during** a repair:

- Connect the set to the Mains/AC Power via an isolation transformer (> 800 VA).
- Replace safety components, indicated by the symbol ⚠, only by components identical to the original ones. Any other component substitution (other than original type) may increase risk of fire or electrical shock hazard.

Safety regulations require that **after** a repair, the set must be returned in its original condition. Pay in particular attention to the following points:

- Route the wire trees correctly and fix them with the mounted cable clamps.
- Check the insulation of the Mains/AC Power lead for external damage.
- Check the strain relief of the Mains/AC Power cord for proper function.
- Check the electrical DC resistance between the Mains/AC Power plug and the secondary side (only for sets that have a Mains/AC Power isolated power supply):
  1. Unplug the Mains/AC Power cord and connect a wire between the two pins of the Mains/AC Power plug.
  2. Set the Mains/AC Power switch to the “on” position (keep the Mains/AC Power cord unplugged!).
  3. Measure the resistance value between the pins of the Mains/AC Power plug and the metal shielding of the tuner or the aerial connection on the set. The reading should be between 4.5 Mohm and 12 Mohm.
  4. Switch “off” the set, and remove the wire between the two pins of the Mains/AC Power plug.
- Check the cabinet for defects, to prevent touching of any inner parts by the customer.

2.2 Warnings

- All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD ⚠). Careless handling during repair can reduce life drastically. Make sure that, during repair, you are connected with the same potential as the mass of the set by a wristband with resistance. Keep components and tools also at this same potential.
- Be careful during measurements in the high voltage section.
- Never replace modules or other components while the unit is switched “on”.
- When you align the set, use plastic rather than metal tools. This will prevent any short circuits and the danger of a circuit becoming unstable.

2.3 Notes

2.3.1 General

- Measure the voltages and waveforms with regard to the chassis (= tuner) ground (⏚), or hot ground (⏚), depending on the tested area of circuitry. The voltages and waveforms shown in the diagrams are indicative. Measure them in the Service Default Mode (see chapter 5) with a Phillips bar signal and stereo sound (L: 3 kHz, R: 1 kHz unless stated otherwise) and picture carrier at 475.25 MHz for PAL, or 61.25 MHz for NTSC (channel 3).
- Where necessary, measure the waveforms and voltages with (⎍) and without (⎍) aerial signal. Measure the voltages in the power supply section both in normal operation (⏻) and in stand-by (⏻). These values are indicated by means of the appropriate symbols.
- Manufactured under license from Dolby Laboratories. “Dolby”, “Pro Logic” and the “double-D symbol”, are trademarks of Dolby Laboratories.

2.3.2 Schematic Notes

- All resistor values are in ohms, and the value multiplier is often used to indicate the decimal point location (e.g. 2K2 indicates 2.2 kohm).
- Resistor values with no multiplier may be indicated with either an “E” or an “R” (e.g. 220E or 220R indicates 220 ohm).
- All capacitor values are given in micro-farads ($\mu = \times 10^{-6}$), nano-farads ($n = \times 10^{-9}$), or pico-farads ($p = \times 10^{-12}$).
- Capacitor values may also use the value multiplier as the decimal point indication (e.g. 2p2 indicates 2.2 pF).
- An “asterisk” (*) indicates component usage varies. Refer to the diversity tables for the correct values.
- The correct component values are listed in the Spare Parts List. Therefore, always check this list when there is any doubt.

2.3.3 BGA (Ball Grid Array) ICs

Introduction

For more information on how to handle BGA devices, visit this URL: *www.atyourservice.ce.philips.com* (needs subscription, not available for all regions). After log-in, select “Magazine”, then go to “Repair downloads”. Here you will find Information on how to deal with BGA-ICs.

BGA Temperature Profiles

For BGA-ICs, you **must** use the correct temperature-profile, which is coupled to the 12NC. For an overview of these profiles, visit the website *www.atyourservice.ce.philips.com* (needs subscription, but is not available for all regions)
You will find this and more technical information within the “Magazine”, chapter “Repair downloads”.
For additional questions please contact your local repair help desk.

2.3.4 Lead-free Soldering

Due to lead-free technology some rules have to be respected by the workshop during a repair:

- Use only lead-free soldering tin Philips SAC305 with order code 0622 149 00106. If lead-free solder paste is required, please contact the manufacturer of your soldering equipment. In general, use of solder paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free soldering tin. The solder tool must be able:
  - To reach a solder-tip temperature of at least 400°C.
  - To stabilize the adjusted temperature at the solder-tip.
  - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature of around 360°C - 380°C is reached and stabilized at the solder joint. Heating time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C, otherwise wear-out of tips will increase drastically and flux-fluid will be destroyed. To avoid wear-out of tips, switch “off” unused equipment or reduce heat.
- Mix of lead-free soldering tin/parts with leaded soldering tin/parts is possible but PHILIPS recommends strongly **to**

avoid mixed regimes. If this cannot be avoided, carefully clear the solder-joint from old tin and re-solder with new tin.

2.3.5 Alternative BOM identification

The **third digit** in the serial number (example: AG**2**B0335000001) indicates the number of the alternative B.O.M. (Bill Of Materials) that has been used for producing the specific TV set. In general, it is possible that the same TV model on the market is produced with e.g. two different types of displays, coming from two different suppliers. This will then result in sets which have the same CTN (Commercial Type Number; e.g. 28PW9515/12) but which have a different B.O.M. number.
By looking at the third digit of the serial number, one can identify which B.O.M. is used for the TV set he is working with. If the third digit of the serial number contains the number “1” (example: AG**1**B033500001), then the TV set has been manufactured according to B.O.M. number 1. If the third digit is a “2” (example: AG**2**B0335000001), then the set has been produced according to B.O.M. no. 2. This is important for ordering the correct spare parts!
For the third digit, the numbers 1...9 and the characters A...Z can be used, so in total: 9 plus 26= 35 different B.O.M.s can be indicated by the third digit of the serial number.

Identification: The bottom line of a type plate gives a 14-digit serial number. Digits 1 and 2 refer to the production center (e.g. AG is Bruges), digit 3 refers to the B.O.M. code, digit 4 refers to the Service version change code, digits 5 and 6 refer to the production year, and digits 7 and 8 refer to production week (in example below it is 2006 week 17). The 6 last digits contain the serial number.



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Figure 2-1 Serial number (example)

2.3.6 Exchanging a Defective PDP

If a PDP has defective or “dead” pixels, do the following:
1. Locate the defective pixels.
2. Indicate their positions by means of a marker (with erasable ink!).
3. Indicate the positions of the defective pixels in the Defects Description Form (DDF), which is published in the PDP manuals.
4. After this, remove the PDP and return it to your Service organization.

If a PDP has to be removed from the TV set, always keep in mind that the PDP parts can easily be damaged by ESD, so take the following protective measures:
- Do not damage the flex foils (they are located on the left, right, upper and lower sides of the PDP).
- Do not scratch the glass plate.
- Avoid fingerprints.

2.3.7 Board Level Repair (BLR) or Component Level Repair (CLR)

If a board is defective, consult your repair procedure to decide if the board has to be exchanged or if it should be repaired on component level.
If your repair procedure says the board should be exchanged completely, do not solder on the defective board. Otherwise, it cannot be returned to the O.E.M. supplier for back charging!

2.3.8 Practical Service Precautions

- **It makes sense to avoid exposure to electrical shock.** While some sources are expected to have a possible dangerous impact, others of quite high potential are of limited current and are sometimes held in less regard.
- **Always respect voltages**. While some may not be dangerous in themselves, they can cause unexpected reactions that are best avoided. Before reaching into a powered TV set, it is best to test the high voltage insulation. It is easy to do, and is a good service precaution.

3. Directions for Use

You can download this information from the following websites:
http://www.philips.com/support
http://www.p4c.philips.com

4. Mechanical Instructions

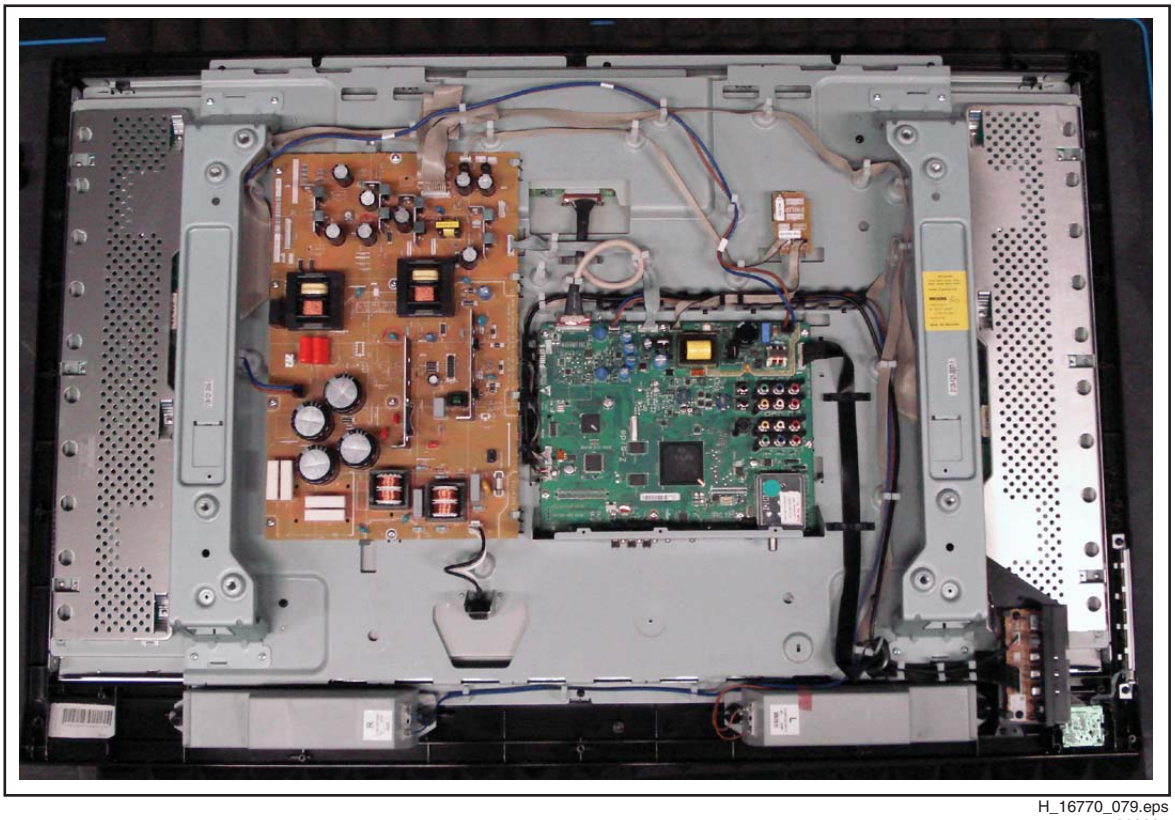
Index of this chapter:

4.1 Cable Dressing
4.2 Service Positions
4.3 Assy/Panel Removal
4.4 Set Re-assembly

Notes:

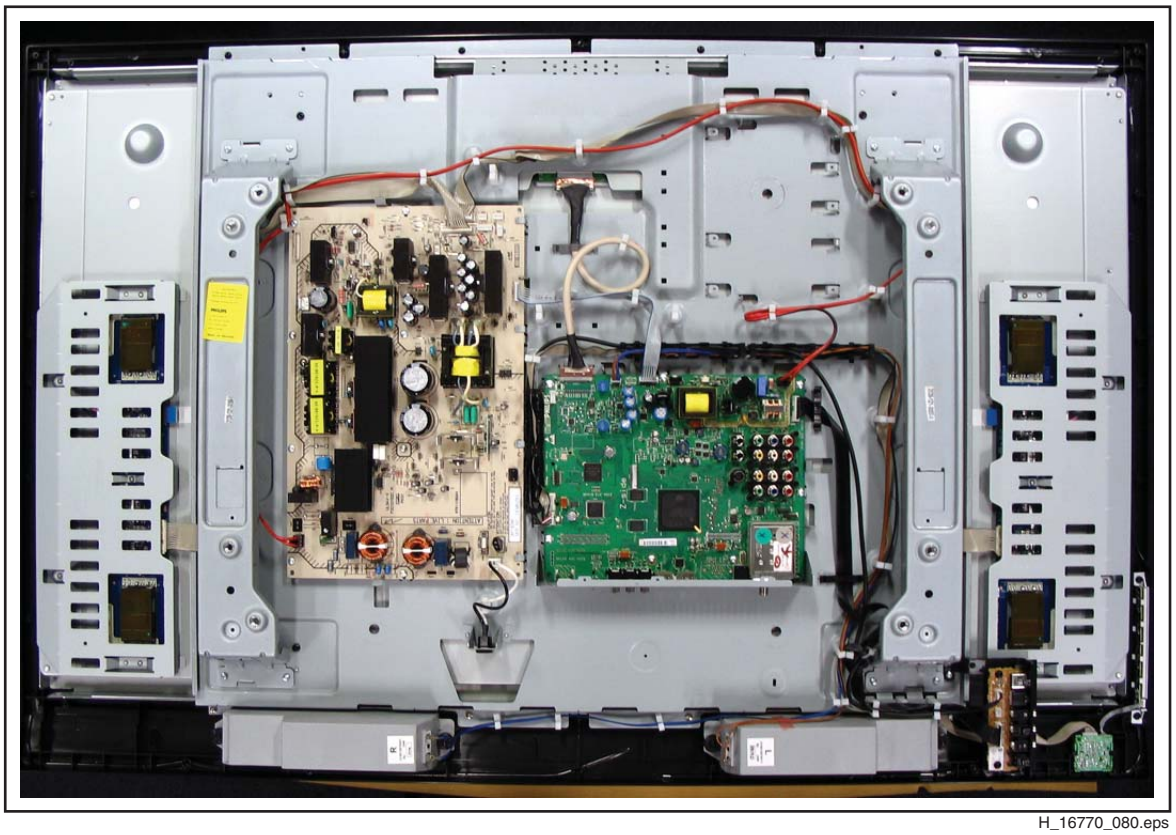
- Figures below can deviate slightly from the actual situation, due to the different set executions.
- Follow the disassemble instructions in described order. They apply to the 47PFL7432D/37 (47" with AmbiLight).

4.1 Cable Dressing



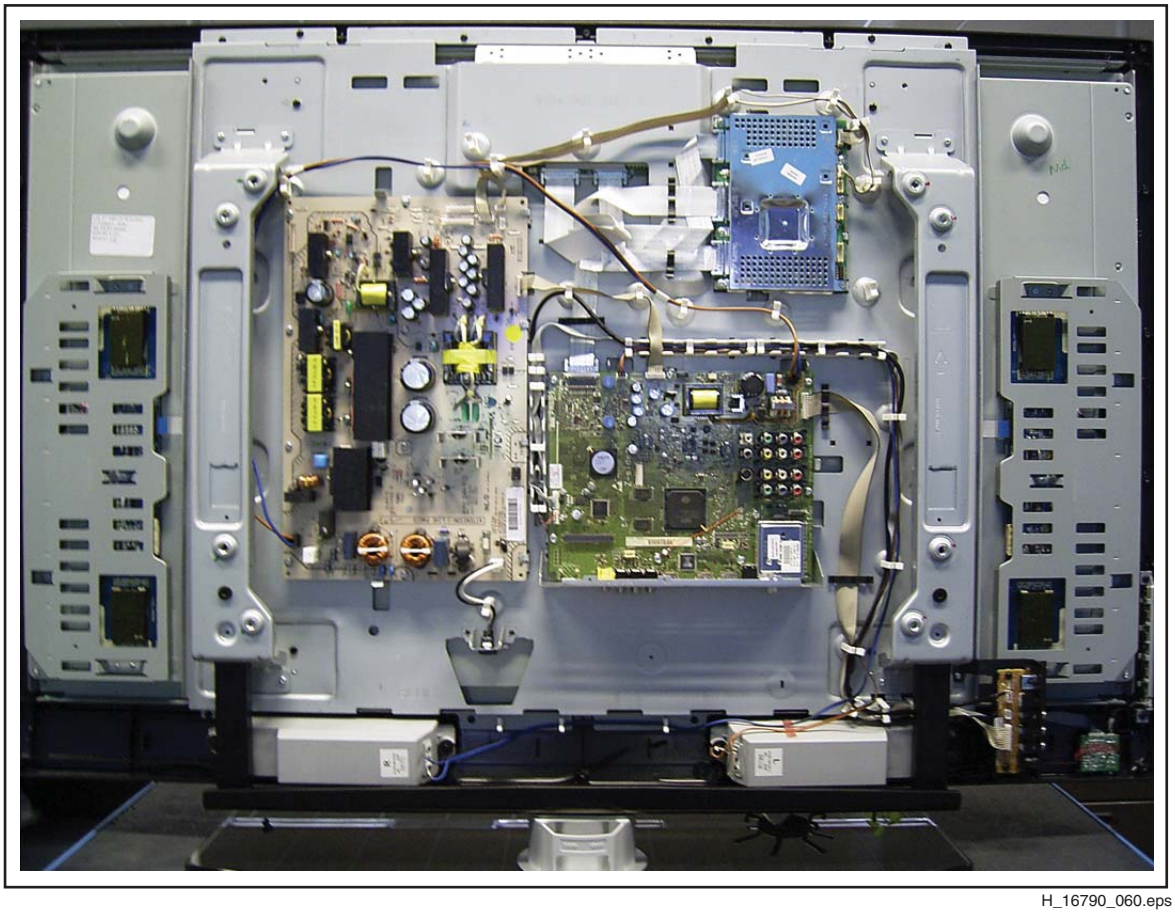
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Figure 4-1 Cable dressing 42" sets (with AmbiLight)



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Figure 4-2 Cable dressing 47" sets (all sets without DFI panel) and 42" sets (without Ambilight)



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Figure 4-3 Cable dressing 47 and 52" sets (optional with DFI panel)

4.2 Service Positions

For easy servicing of this set, there are a few possibilities created:

- The buffers from the packaging (see figure “Rear cover”).
- Foam bars (created for Service).
- Aluminium service stands (created for Service).

4.2.1 Foam Bars

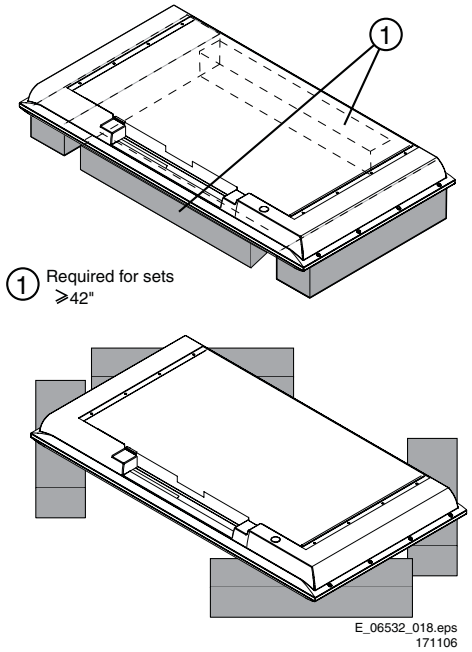


Figure 4-4 Foam bars

The foam bars (order code 3122 785 90580 for two pieces) can be used for all types and sizes of Flat TVs. See figure “Foam bars” for details. Sets with a display of 42" and larger, require **four** foam bars [1]. Ensure that the foam bars are always supporting the cabinet and **never** only the display. **Caution:** Failure to follow these guidelines can seriously damage the display!
By laying the TV face down on the (ESD protective) foam bars, a stable situation is created to perform measurements and alignments. By placing a mirror under the TV, you can monitor the screen.

4.2.2 Aluminium Stands

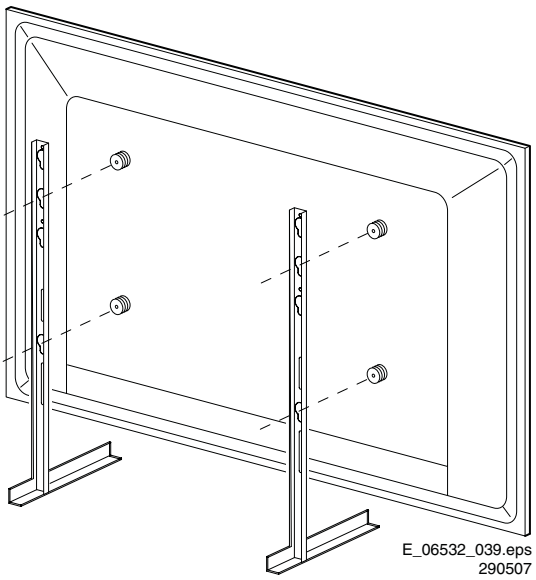


Figure 4-5 Aluminium stands

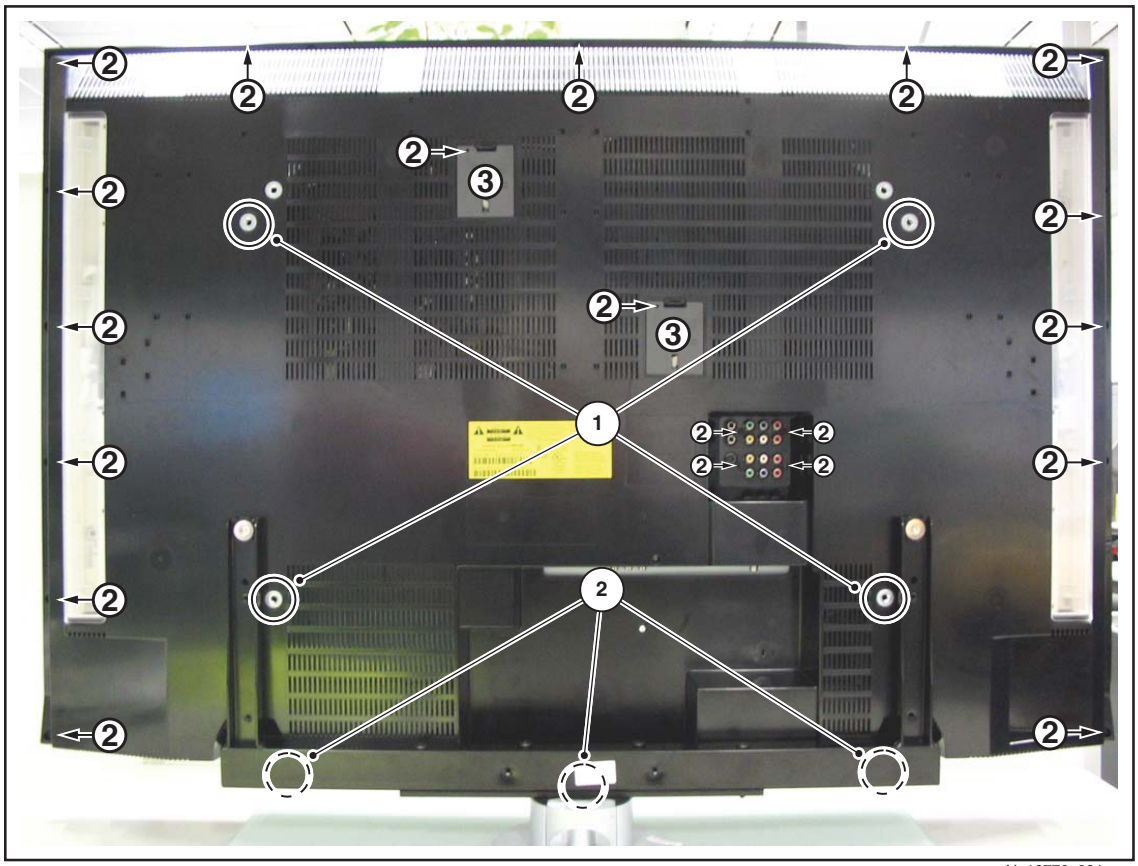
The MkII aluminium stands with order code 3122 785 90690, can also be used to do measurements, alignments, and duration tests. The stands can be (dis)mounted quick and easy by means of sliding them in/out the “mushrooms”. The stands are backwards compatible with the earlier models.
Important: For (older) FTV sets without these “mushrooms”, it is obligatory to use the provided screws, otherwise it is possible to damage the monitor inside!

4.3 Assy/Panel Removal

4.3.1 Rear Cover

Warning: Disconnect the mains power cord before you remove the rear cover.

Refer to figure “Rear Cover Removal” for details.

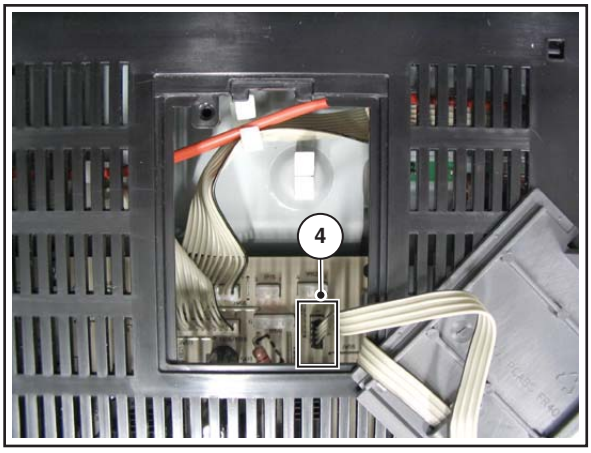


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Figure 4-6 Rear Cover Removal

1. Remove the stand.
2. Remove the mushrooms [1].
3. Remove the screws [2].
4. Open the covers [3] on the back cover.

Refer to figures “Cover Removal” for details.

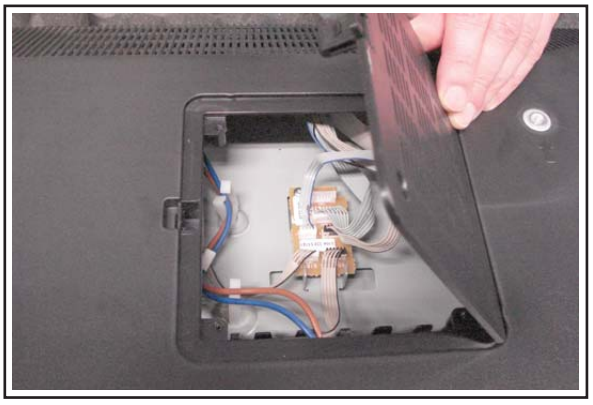


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Figure 4-7 Cover Removal

1. Unplug connector [4].

Note:
42" Sets with AmbiLight have an extra cover. Refer to figure “Cover Removal - 42" sets with AmbiLight” for details.



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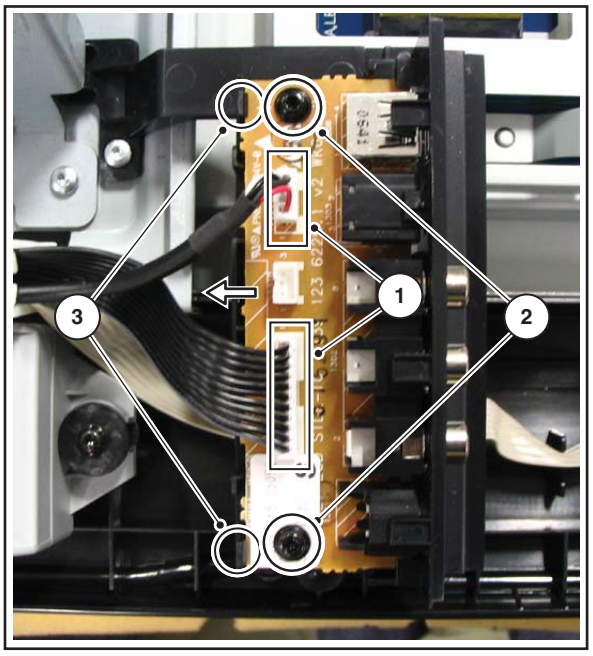
Figure 4-8 Cover Removal - 42" sets with AmbiLight

1. Unplug connectors necessary for removing the backcover.

4.3.2 Side I/O Board

Refer to figure “Side I/O Board” for details.
1. Unplug connectors [1].
2. Remove screw [2].
3. Push brackets [3], lift the PWB and slide it to the left out of its casing.

When defective, replace the whole unit.



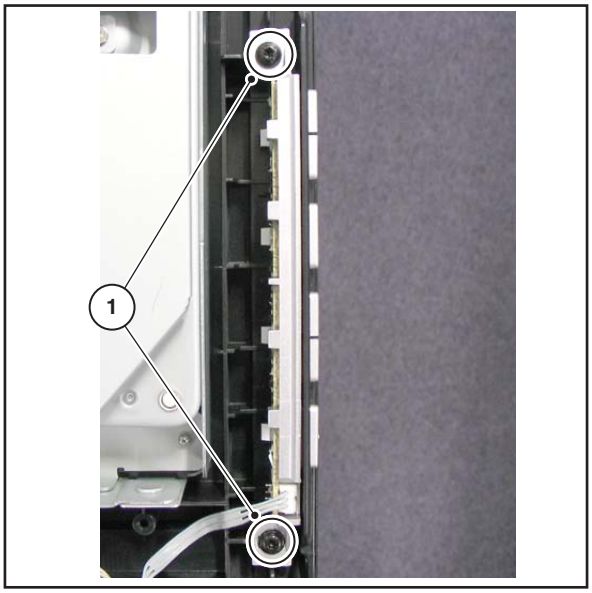
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Figure 4-9 Side I/O Board

4.3.3 Keyboard Control Board

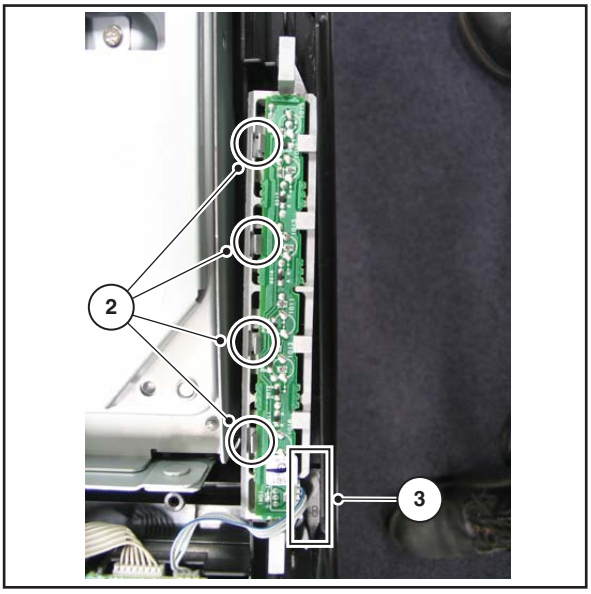
Refer to figures “Keyboard Control Board -1-” and “Keyboard Control Board -2-” for details.
1. Remove the screws [1].
2. Lift the clamps [2].
3. Take the PWB out of its casing.
4. Unplug the connector [3] and remove the board.

When defective, replace the whole unit.



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Figure 4-10 Keyboard Control Board -1-



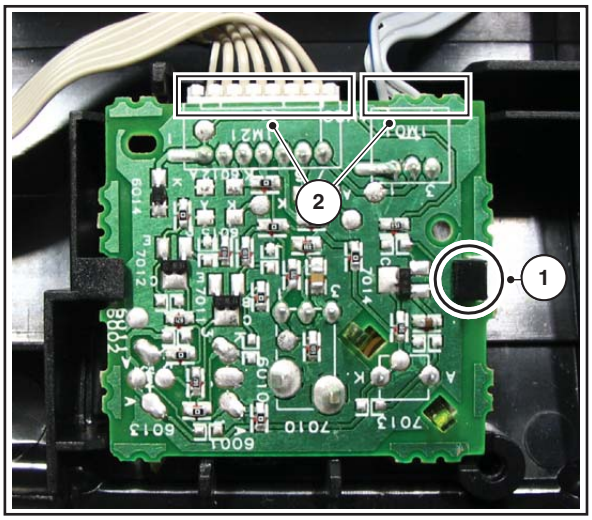
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Figure 4-11 Keyboard Control Board -2-

4.3.4 IR & LED Board

Refer to figure “IR & LED Board” for details.
1. Release clip [1], lift the board and take it out.
2. Unplug connector [2].

When defective, replace the whole unit.

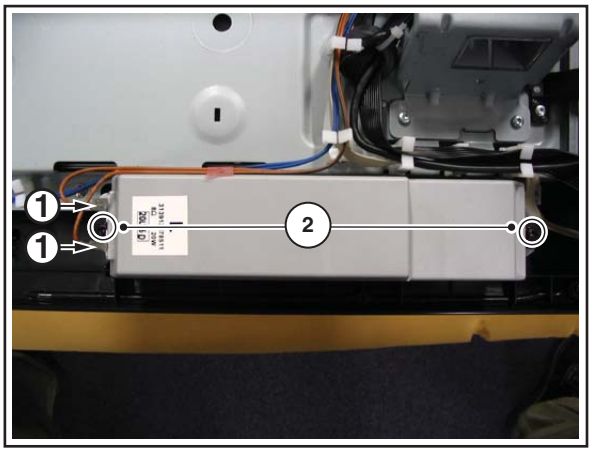


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Figure 4-12 IR & LED Board

4.3.5 Speakers

Refer to figure “Speakers” for details.
1. Unplug connectors [1].
2. Remove screws [2].

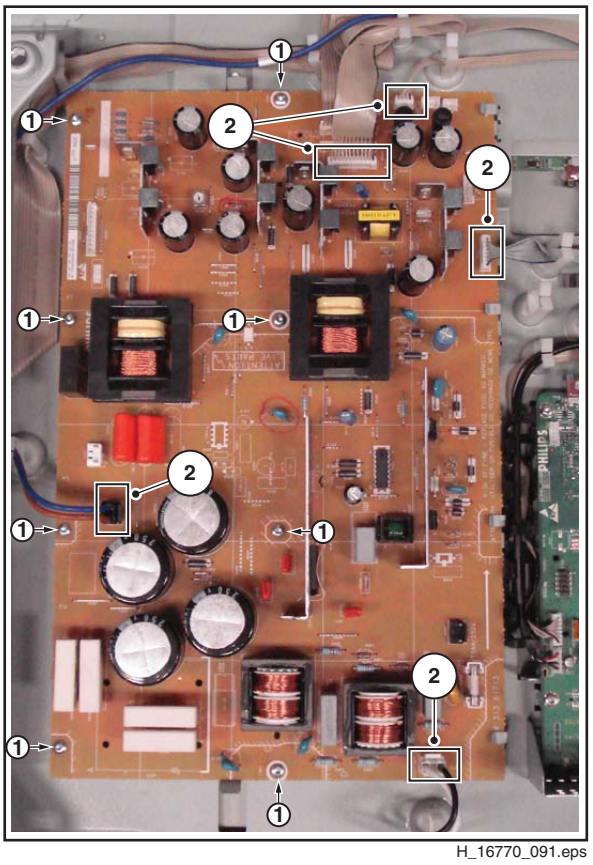


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Figure 4-13 Speakers

4.3.6 Platform Supply Panel - 42" sets

Refer to figure “Platform Supply Panel - 42" sets” for details.
1. Remove the fixation screws [1].
2. Unplug connectors [2].
3. Take the board out.

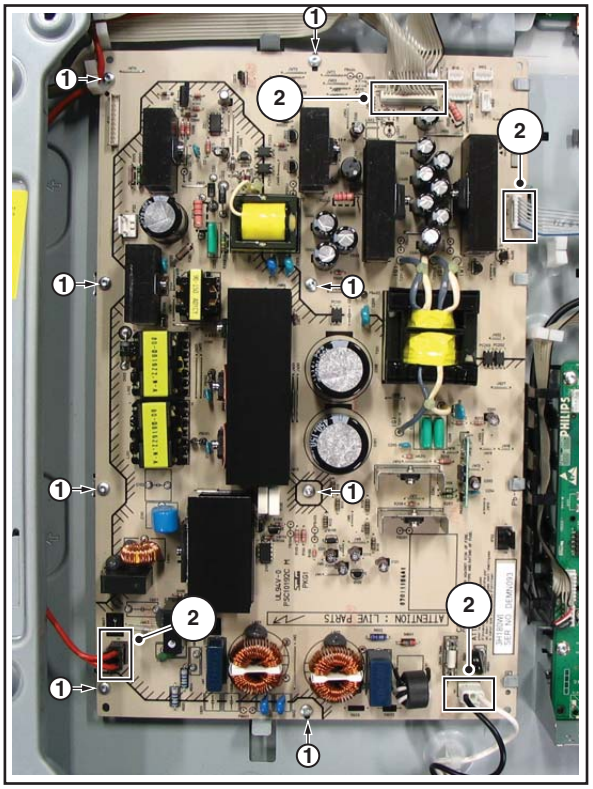


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Figure 4-14 Platform Supply Panel - 42" sets

4.3.7 Platform Supply Panel - 47" sets

Refer to figure “Platform Supply Panel - 47" sets” for details.
1. Remove the fixation screws [1].
2. Unplug connectors [2].
3. Take the board out.

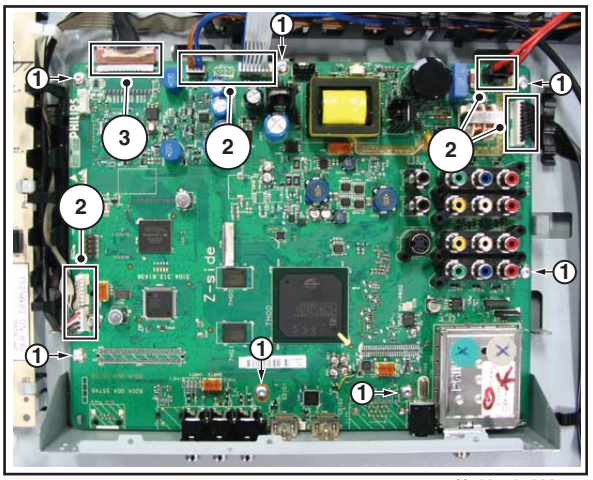


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Figure 4-15 Platform Supply Panel - 47" sets

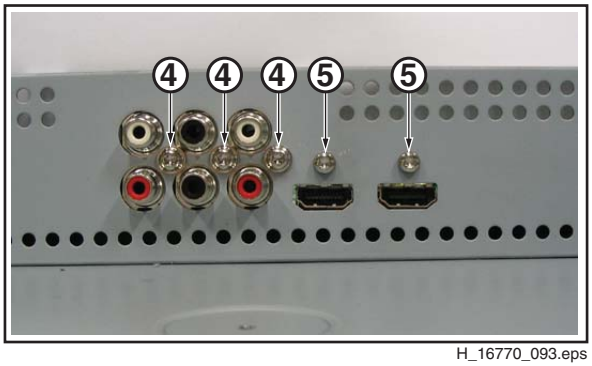
4.3.8 Small Signal Board (SSB)

Caution: it is mandatory to remount all different screws at their original position during re-assembly. Failure to do so may result in damaging the SSB.
Refer to figures “Small Signal Board -1-” and “Small Signal Board -2-” for details.
1. Remove the tapping screws [1].
2. Unplug the connectors [2].
3. Unplug the LVDS connector [3]. **Caution:** be careful, as this is a very fragile connector!
4. Remove the parker screws [4].
5. Remove the tapping screws [5].
6. Carefully lift the SSB at the top and take it out of the set.



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Figure 4-16 Small Signal Board -1-



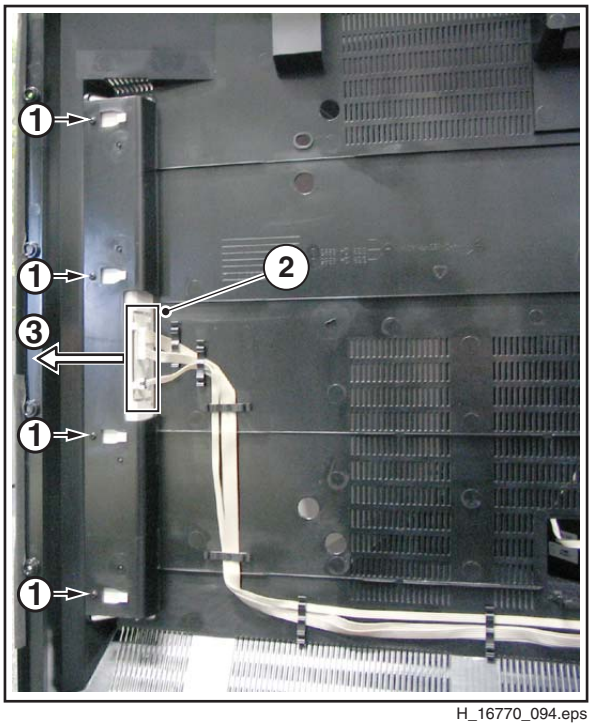
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Figure 4-17 Small Signal Board -2-

4.3.9 AmbiLight Unit

The AmbiLight Units are located in the back cover. Refer to figure “AmbiLight Unit” for details.

1. Remove the screws [1].
2. Unplug the connectors [2].
3. Slide the unit sideways and take it out of the backcover.



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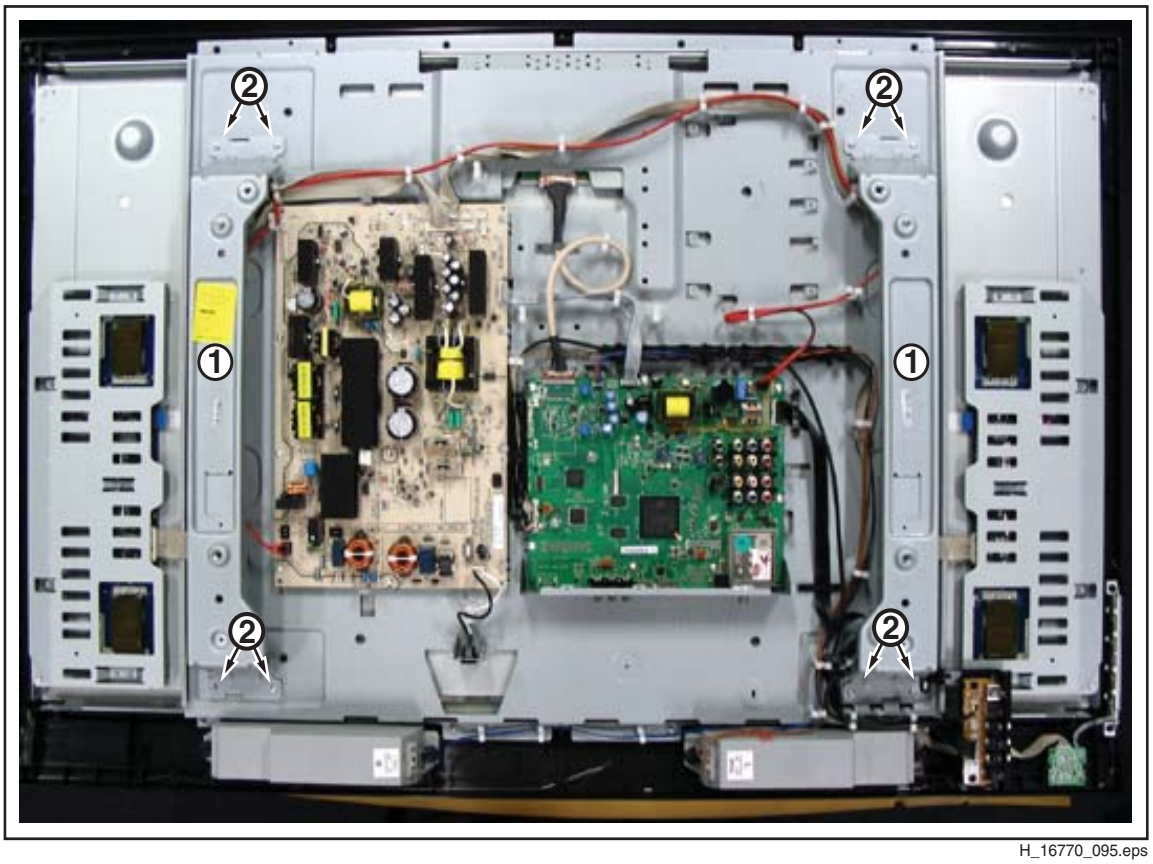
Figure 4-18 AmbiLight Unit

When defective, replace the whole unit.

4.3.10 LCD Panel

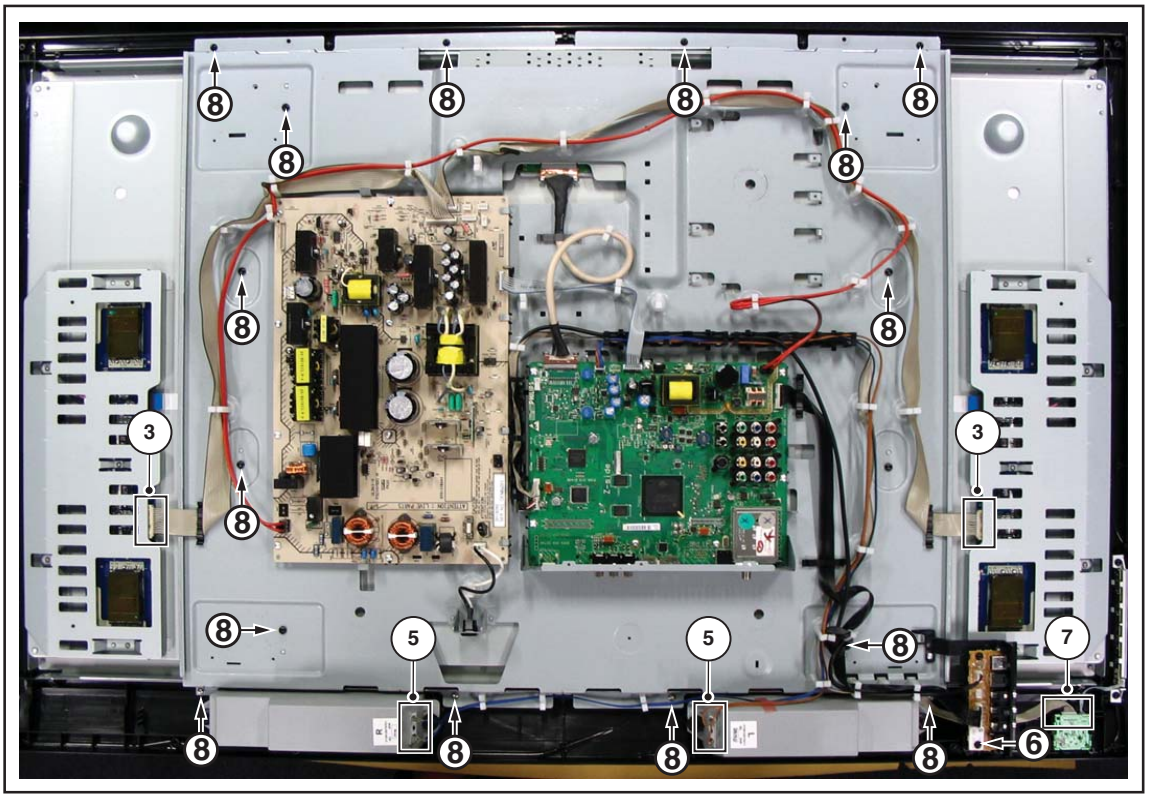
Refer to figures “LCD Panel -1-” and “LCD Panel -2-” for details.

1. Remove the vertical brackets [1] by removing the screws [2].
2. Unplug the connectors [3].
3. Unplug the LVDS connector [4] from the LCD panel. **Important:** Be careful, as this is a very fragile connector!
4. Unplug the connectors [5] from the speakers.
5. Remove fixation screw [6] from the side I/O panel.
6. Unplug connector from LED I/R panel as earlier described [7].
7. Remove fixation screws [8] and lift the complete central sub-frame [6] from the set.
8. Lift the central sub-frame from the set. Refer to figure Central Sub-frame lift for details.
9. Lift the LCD panel from the front cabinet.



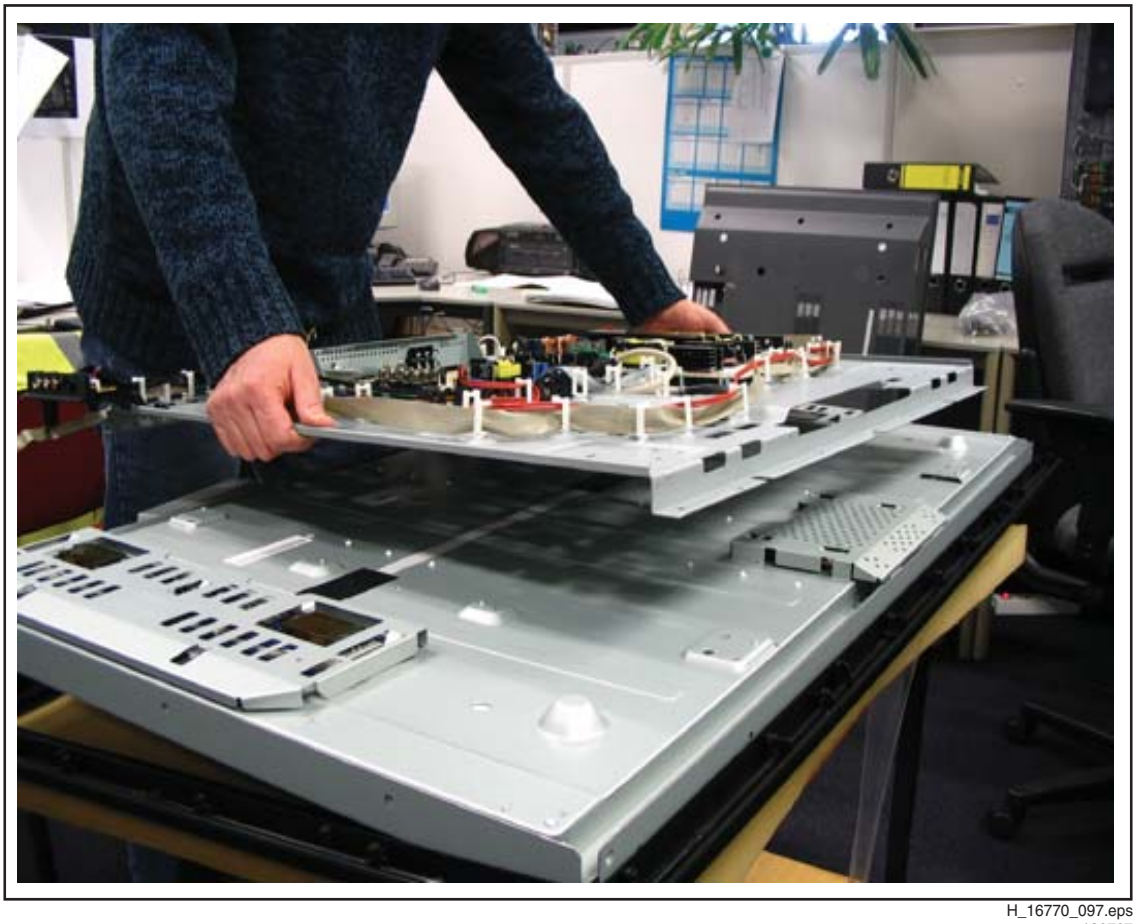
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Figure 4-19 LCD Panel -1-



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Figure 4-20 LCD Panel -2-



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Figure 4-21 Central Sub-frame

4.4 Set Re-assembly

To re-assemble the whole set, execute all processes in reverse order.

Notes:

- While re-assembling, make sure that all cables are placed and connected in their original position. See figure “Cable dressing”.
- Pay special attention not to damage the EMC foams on the SSB shields. Ensure that EMC foams are mounted correctly.

5. Service Modes, Error Codes, and Fault Finding

Index of this chapter:

5.1 Test Points
5.2 Service Modes
5.3 Stepwise Start-up
5.4 Service Tools
5.5 Error Codes
5.6 The Blinking LED Procedure
5.7 Protections
5.8 Fault Finding and Repair Tips
5.9 Software Upgrading

5.1 Test Points

As most signals are digital, it will be difficult to measure waveforms with a standard oscilloscope. Several key ICs are capable of generating test patterns, which can be controlled via ComPair. In this way it is possible to determine which part is defective.

Perform measurements under the following conditions:
- Service Default Mode.
- Video: Color bar signal.
- Audio: 3 kHz left, 1 kHz right.

5.2 Service Modes

Service Default mode (SDM) and Service Alignment Mode (SAM) offers several features for the service technician, while the Customer Service Mode (CSM) is used for communication between the call centre and the customer.

This chassis also offers the option of using ComPair, a hardware interface between a computer and the TV chassis. It offers the abilities of structured troubleshooting, error code reading, and software version read-out for all chassis. (see also paragraph “ComPair”).

5.2.1 Service Default Mode (SDM)

Purpose
- To create a pre-defined setting, to get the same measurement results as given in this manual.
- To override SW protections detected by stand-by processor and make the TV start up to the step just before protection (a sort of automatic stepwise start up). See paragraph “Stepwise Start Up”.
- To override SW protections detected by Mips. See also paragraph “Error codes”.
- To start the blinking LED procedure (not valid for protections detected by stand-by software).

Specifications

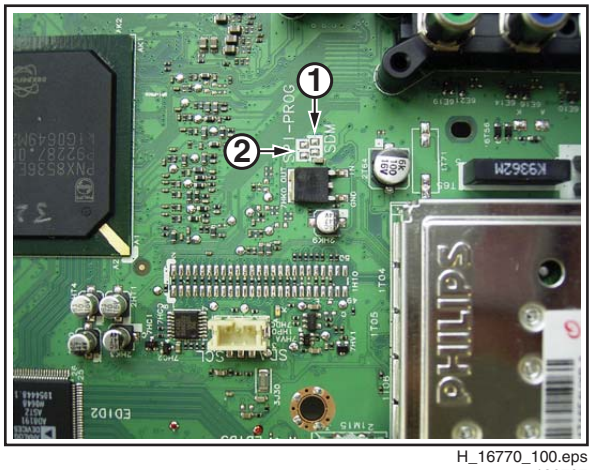
Table 5-1 SDM default settings

Region	Freq. (MHz)	Default system
Europe, AP(PAL/Multi)	475.25	PAL B/G
Europe, AP DVB-T	546.00 PID Video: 0B 06 PID PCR: 0B 06 PID Audio: 0B 07	DVB-T
NAFTA, AP-NTSC, LATAM	61.25 (ch 3)	NTSC M

- Tuning frequency 61.25 MHz for NTSC: The TV shall tune to physical channel 3 only if channel 3 is an analog channel or if there is no channel 3 installed in the channel map. If there is a digital channel installed in channel 3, then the frequency to which the set will tune, would be as specified in the channel map and could be different from the one corresponding to the physical channel 3.
- All picture settings at 50% (brightness, color, contrast).
- All sound settings at 50%, except volume at 25%.
- All service-unfriendly modes (if present) are disabled, like:
  - (Sleep) timer.
  - Child/parental lock.
  - Picture mute (blue mute or black mute).
  - Automatic volume levelling (AVL).
  - Auto switch “off” (when no video signal was received for 10 minutes).
  - Skip/blank of non-favorite pre-sets.
  - Smart modes.
  - Auto store of personal presets.
  - Auto user menu time-out.

How to Activate SDM

For this chassis there are two kinds of SDM: an analog SDM and a digital SDM. Tuning will happen according table “SDM Default Settings”.
- **Analog SDM:** use the standard RC-transmitter and key in the code “062596”, directly followed by the “MENU” button. **Note:** It is possible that, together with the SDM, the main menu will appear. To switch it “off”, push the “MENU” button again.
- **Digital SDM:** use the standard RC-transmitter and key in the code “062593”, directly followed by the “MENU” button. **Note:** It is possible that, together with the SDM, the main menu will appear. To switch it “off”, push the “MENU” button again.
- **Analog SDM** can also be activated by shortening for a moment the two solder pads [1] (see figure “Service mode pads”) on the SSB, with the indication “SDM”. Activation can be performed in all modes, except when the set has a problem with the Stand-by Processor.



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Figure 5-1 Service mode pads

After activating this mode, “SDM” will appear in the upper right corner of the screen (if you have picture).

How to Navigate
When you press the “MENU” button on the RC transmitter, the set will toggle between the SDM and the normal user menu (with the SDM mode still active in the background).

How to Exit SDM
Use one of the following methods:
- Switch the set to STAND-BY via the RC-transmitter.
- Via a standard customer RC-transmitter: key in “00”-sequence.

5.2.2 Service Alignment Mode (SAM)

Purpose
- To perform (software) alignments.
- To change option settings.
- To easily identify the used software version.
- To view operation hours.
- To display (or clear) the error code buffer.

How to Activate SAM
Via a standard RC transmitter: key in the code “062596” directly followed by the “INFO” button. After activating SAM with this method a service warning will appear on the screen, you can continue by pressing the red button on the RC.

Contents of SAM:
- **Hardware Info.**
  - **A. SW Version.** Displays the software version of the main software (**example:** Q531U-1.2.3.4 = AAAAB_X.Y.W.Z).
    - **AAAA**= the software name.
    - **B**= the region: A= AP, E= EU, L= LatAm, U = US. For AP sets it is possible that the Europe software version is used.
    - **X.Y.W.Z**= the software version, where X is the main version number (different numbers are not compatible with one another) and Y.W.Z is the sub version number (a higher number is always compatible with a lower number).
  - **B. SBY PROC Version.** Displays the software version of the stand-by processor.
  - **C. Production Code**. Displays the production code of the TV, this is the serial number as printed on the back of the TV set. Note that if an NVM is replaced or is initialized after corruption, this production code has to be re-written to NVM. ComPair will foresee in a possibility to do this.
- **Operation Hours.** Displays the accumulated total of operation hours (not the stand-by hours). Every time the TV is switched “on/off”, 0.5 hours is added to this number.
- **Errors.** (Followed by maximal 10 errors). The most recent error is displayed at the upper left (for an error explanation see paragraph “Error Codes”).
- **Reset Error Buffer.** When you press “cursor right” and then the “OK” button, the error buffer is reset.
- **Alignments.** This will activate the “ALIGNMENTS” sub-menu.
- **Dealer Options.** Extra features for the dealers.
- **Options.** Extra features for Service. For more information regarding option codes, see chapter 8.
  Note that if you change the option code numbers, you have to confirm your changes with the “OK” button before you store the options. Otherwise you will lose your changes.
- **Initialize NVM.** When an NVM was corrupted (or replaced) in the former EMG based chassis, the microprocessor replaces the content with default data (to assure that the set can operate). However, all preferences and alignment values are gone now, and option numbers are not correct. Therefore, this was a very drastic way. In this chassis, the procedure is implemented in another way: The moment the processor recognizes a corrupted NVM, the “initialize NVM” line will be highlighted. Now, you can do two things (dependent of the service instructions at that moment):
  - Save the content of the NVM via ComPair for development analysis, **before** initializing. This will give the Service department an extra possibility for diagnosis (e.g. when Development asks for this).
  - Initialize the NVM (same as in the past, however now it happens conscious).

Note: When you have a corrupted NVM, or you have replaced the NVM, there is a high possibility that you will not have picture any more because your display option is not correct. So, before you can initialize your NVM via the SAM, you need to have picture and therefore you need the correct display option. To adapt this option, you can use ComPair (the correct HEX values for the options can be found in the table below) or a method via a standard RC (described below).
Changing the display option via a standard RC: Key in the code “062598” directly followed by the “MENU” button and “XXX” (where XXX is the 3 digit decimal display option code as mentioned in the first column of the next table). Make sure to key in all three digits, also the leading zero’s. If the above action is successful, the front LED will go out as an indication that the RC sequence was correct. After the display option is changed in the NVM, the TV will go to the Stand-by mode. If the NVM was corrupted or empty before this action, it will be initialized first (loaded with default values). This initializing can take up to 20 seconds.
- **Store.** All options and alignments are stored when pressing “cursor right” (or the “OK” button) and then the “OK”-button.
- **SW Maintenance.**
  - **SW Events.** Not useful for Service purposes. In case of specific software problems, the development department can ask for this information.
  - **HW Events.** Not useful for Service purposes. In case of specific software problems, the development department can ask for this information.
- **Operation hours PDP.** Here you are able to reset the operations hours of the plasma display. This has to be done in case of replacement of the display. Not applicable to LCD sets.
- **Test settings.** for development purposes only.
- **Upload to USB.** Here you are able to upload several settings from the TV to a USB stick which is connected to the Side I/O. The items are “Channel list”, “Personal settings”, “Option codes” and “Display-related alignments”. First you have to create a directory “repair\” in the root of the USB stick.To upload the settings you have to select each item separately, press “cursor right”, confirm with “OK” and wait until “Done” appears. Now the settings are

stored onto your USB stick and can be used to download onto another TV or other SSB. Uploading is of course only possible if the software is running and if you have picture. This method is created to be able to save the customer's TV settings and to store them into another SSB.
- **Download from USB.** Here you are able to download several settings from the USB stick to the TV. Same way of working as with uploading. To make sure that the download of the channel list from USB to the TV is executed properly, it is necessary to restart the TV and tune to a valid preset if necessary.

How to Navigate
- In SAM, you can select the menu items with the "CURSOR UP/DOWN" key on the RC-transmitter. The selected item will be highlighted. When not all menu items fit on the screen, move the "CURSOR UP/DOWN" key to display the next/previous menu items.
- With the "CURSOR LEFT/RIGHT" keys, it is possible to:
  – (De) activate the selected menu item.
  – (De) activate the selected sub menu.
- With the "OK" key, it is possible to activate the selected action.

How to Exit SAM
Use one of the following methods:
- Press the "MENU" button on the RC-transmitter.
- Switch the set to STAND-BY via the RC-transmitter.

5.2.3 Customer Service Mode (CSM)

Purpose
When a customer is having problems with his TV-set, he can call his dealer or the Customer Helpdesk. The service technician can then ask the customer to activate the CSM, in order to identify the status of the set. Now, the service technician can judge the severity of the complaint. In many cases, he can advise the customer how to solve the problem, or he can decide if it is necessary to visit the customer.
The CSM is a read only mode; therefore, modifications in this mode are not possible.
When in this chassis, CSM is activated, a color bar test pattern will be visible for 5 seconds. This test pattern is generated by the Pacific3. So if you see this test pattern you can determine that the back end video chain (Pacific3, LVDS and display) is working.
Remark: Because of the possible addition of the DFI function, the Pacific IC is not any longer the last hardware block in front of the display. This means that switching on the Pacific testpattern, resulting in no or bad picture, can be caused by a bad DFI or Display. To distinguish between these two, the DFI testpattern will be switched on for three seconds, three seconds after the Pacific testpattern is started.
This will result in following sequence:
- CSM entry code given
- 3 sec Pacific test pattern
- 3 sec DFI test pattern
- CSM menu entered

Also new in this chassis: when you activate CSM and there is a USB stick connected to the TV, the software will dump the complete CSM content to the USB stick. The file (Csm.txt) will be saved in the root of your USB stick. This information can be handy if you don't have picture.
Other new item in this chassis is when CSM is activated the complete error-buffer content will be shown via the blinking LED procedure.

How to Activate CSM
Key in the code "123654" via the standard RC transmitter.

Note: Activation of the CSM is only possible if there is no (user) menu on the screen!

How to Navigate
By means of the "CURSOR-DOWN/UP" knob on the RC-transmitter, you can navigate through the menus.

Contents of CSM
- **Set Type.** This information is very helpful for a helpdesk/ workshop as reference for further diagnosis. In this way, it is not necessary for the customer to look at the rear of the TV-set. Note that if an NVM is replaced or is initialized after corruption, this set type has to be re-written to NVM. ComPair will foresee a possibility to do this.
- **Production Code.** Displays the production code (the serial number) of the TV. Note that if an NVM is replaced or is initialized after corruption, this production code has to be re-written to NVM. ComPair will foresee a possibility to do this.
- **Code 1.** Gives the latest five errors of the error buffer. As soon as the built-in diagnose software has detected an error the buffer is adapted. The last occurred error is displayed on the leftmost position. Each error code is displayed as a 2-digit number. When less than 10 errors occur, the rest of the buffer is empty (00). See also paragraph "Error Codes" for a description.
- **Code 2.** Gives the first five errors of the error buffer. See also paragraph "Error Codes" for a description.
- **Options 1.** Gives the option codes of option group 1 as set in SAM (Service Alignment Mode).
- **Options 2.** Gives the option codes of option group 2 as set in SAM (Service Alignment Mode).
- **12NC SSB.** Gives an identification of the SSB as stored in NVM. Note that if an NVM is replaced or is initialized after corruption, this identification number has to be re-written to NVM. ComPair will foresee a possibility to do this. This identification number consists of 14 characters and is built up as follows:
  - 7 last characters of the 12NC of the SSB itself
  - the serial number of the SSB, which consists of 7 digits.
  Both can be found on a sticker on the PWB of the SSB itself. The format of the identification number is then as follows: <last 7 characters of 12NC of SSB><serial number of SSB> (total 14 characters).
- **Installed date.** Indicates the date of the first installation of the TV. This date is acquired via time extraction from a PBS (Public Broadcast Channel).
- **Pixel Plus.** Gives the last status of the Pixel Plus setting, as set by the customer. Possible values are "ON" and "OFF". See DFU on how to change this item.
- **DNR.** Gives the last status of the DNR setting, as set by the customer. Possible values are "OFF", "MINIMUM", "MEDIUM" and "MAXIMUM". See DFU on how to change this item.
- **Noise Figure.** Gives the noise ratio for the selected transmitter. This value can be defined as "BAD", "AVERAGE", "GOOD "or "DIGITAL". In case of a digital channel, this item will never indicate: "BAD", "GOOD" or "AVERAGE" but only displays "DIGITAL".
- **12NC Display.** 12NC of the display.
- **Head phone Volume.** Gives the last status of the head phone volume, as set by the customer. The value can vary from 0 (volume is minimum) to 100 (volume is maximum). See DFU on how to change this item.
- **Surround Mode.** Indicates the by the customer selected sound mode (or automatically chosen mode). Possible values are "STEREO" and "VIRTUAL DOLBY SURROUND". It can also have been selected automatically by signalling bits (internal software). See DFU on how to change this item.
- **AVL.** Indicates the last status of AVL (Automatic Volume Level) as set by the customer: See DFU on how to change this item.
- **Delta Volume.** Indicates the last status of the delta volume for the selected preset as set by the customer: from "-12" to "+12". See DFU on how to change this item.

- **Volume.** Indicates the last status of the volume for the selected preset as set by the customer: from “0” to “100”. See DFU on how to change this item.
- **Balance.** Indicates the last status of the balance for the selected preset as set by the customer: from “-10” to “+10”. See DFU on how to change this item.
- **Preset Lock.** Indicates if the selected preset has a child lock: “LOCKED” or “UNLOCKED”. See DFU on how to change this item.
- **Lock after.** Indicates at what time the channel lock is set: “OFF” or e.g. “18:45” (lock time). See DFU on how to change this item.
- **TV ratings lock.** Indicates the “TV ratings lock” as set by the customer. Change via “MENU”, “TV”, “CHANNELS”, “TV RATINGS LOCK”. Possible values are: “ALL”, “NONE”, “TV-Y”, “TV-Y7”, “TV-G”, “TV-PG”, “TV-14” and “TV-MA”.
- **Movie ratings lock.** Indicates the “Movie ratings lock” as set by the customer. Change via “MENU”, “TV”, “CHANNELS”, “MOVIE RATINGS LOCK”. Possible values are “ALL”, “NR”, “G”, “PG”, “PG-13”, “R”, “NC-17” and “X”.
- **V-Chip TV status.** Indicates the setting of the V-chip as applied by the selected TV channel. Same values can be shown as for “TV RATINGS LOCK”.
- **V-Chip movie status. Indicates the setting of the V-chip as applied by the selected TV channel. Same values can be shown as for “MOVIE RATINGS LOCK”.**
- **Region rating status (RRT).** Displays the Rating Region Table.
- **Region rating enabled.** Indicates if the ratings are enabled.
- **Table channel changed.** Indicates if the table has been changed at broadcast side.
- **On timer.** Indicates if the “On timer” is set “ON” or “OFF” and when it is set to “ON”, also start time, start day and program number is displayed. See DFU on how to change this item.
- **Location.** Gives the last status of the location setting as set via the installation menu. Possible values are “SHOP” and “Home”. If the location is set to “SHOP”, several settings are fixed. So for a customer location must be set to “HOME”. Can be changed via the installation menu (see also DFU).
- **HDMI key validity.** Indicates if the HDMI keys (or HDCP keys) are valid or not. In case these keys are not valid and the customer wants to make use of the HDMI functionality, the SSB has to be replaced.
- **TV System.** Gives information about the video system of the selected transmitter. In case a DVBT signal is received this item will also show ATSC.
  - BG: PAL BG signal received
  - DK: PAL DK signal received
  - L/La: SECAM L/La signal received
  - I: PAL I signal received
  - M: NTSC M signal received
  - ATSC: ATSC signal received
- **12NC one zip SW.** Displays the 12NC number of the one-zip file as it is used for programming software in production. In this one-zip file all below software version can be found.
- **Initial main SW.** Displays the main software version which was initially loaded by the factory.
- **Current main SW.** Displays the built-in main software version. In case of field problems related to software, software can be upgraded. As this software is consumer upgradeable, it will also be published on the Internet. Example: Q531U_1.2.3.4.
- **Flash utilities SW.** Displays the software version of the software which contains all necessary components of the download application. To program this software, EJTAG tooling is needed. Example: Q531U_1.2.3.4.
- **Standby SW.** Displays the built-in stand-by processor software version. Upgrading this software will be possible via ComPair or via USB.(see chapter Software upgrade). Example: STDBY_3.0.1.2.
- **MOP SW.** Displays the MOP software version.
- **Pacific 3 Flash SW.** Displays the Pacific 3 software version.
- **NVM version.** Displays the NVM version as programmed by factory.
- **Display parameters.** for development purposes only.
- **Private PQ parameters.** for development purposes only.
- **Public PQ parameters.** for development purposes only.
- **Ambilight parameters.** for development purposes only.
- **Acoustics parameters.** for development purposes only.
- **DFI software (if applicable).** Displays the DFI EPLD software.
- **DFI ambilight software.** Not applicable for US.

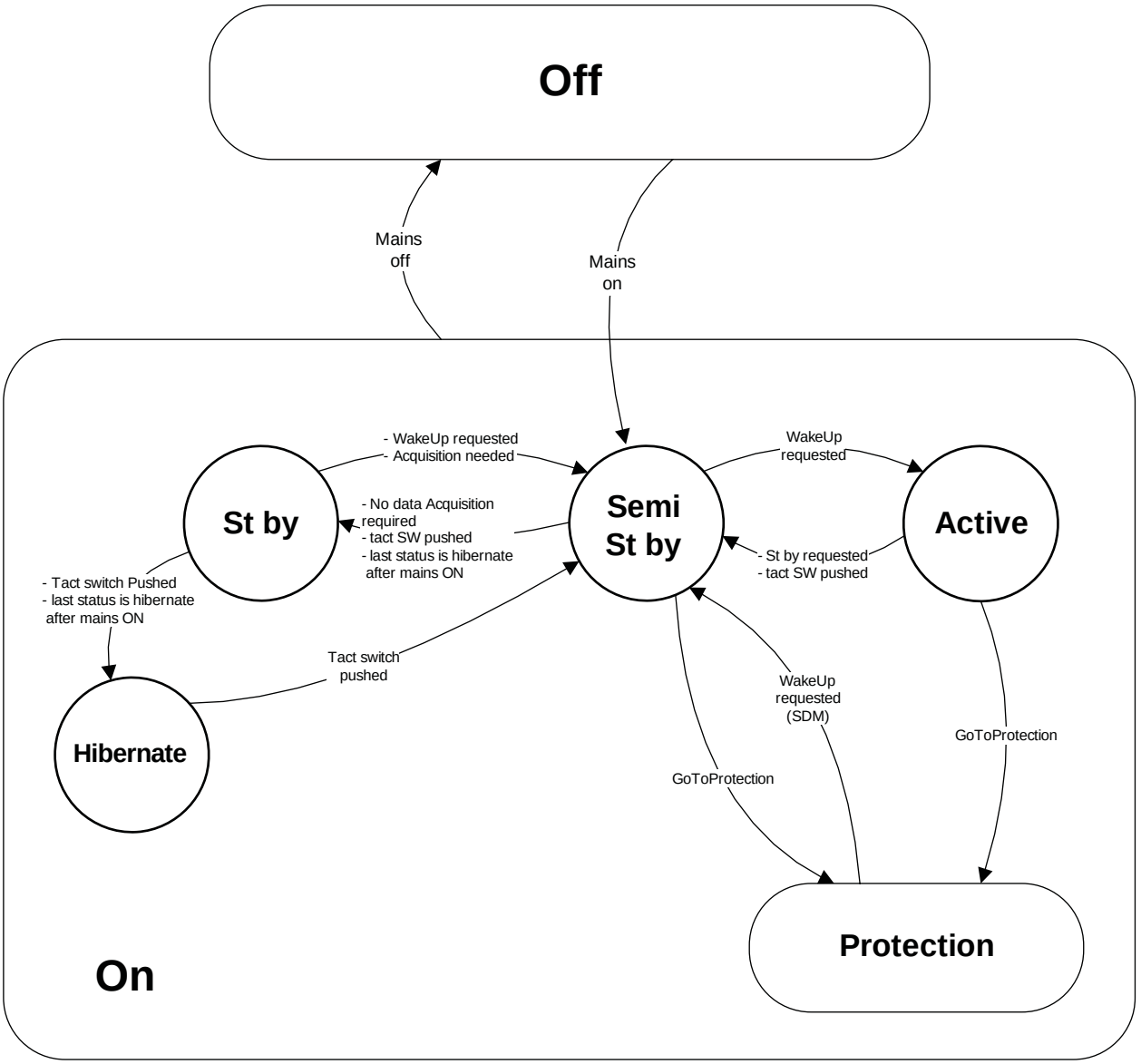
How to Exit CSM

Press “MENU” on the RC-transmitter.

5.3 Stepwise Start-up

The stepwise start-up method, as known from FTL/FTP sets (EMG based sets) is not valid any more. There are two possible situation: one for protections detected by stand-by software and one for protections detected by main software.
When the TV is in a protection state due to an error detected by stand-by software (and thus blinking an error) **and** SDM is activated via short-circuiting the pins on the SSB, the TV starts up until it reaches the situation just before protection. So, this is a kind of automatic stepwise start-up. In combination with the start-up diagrams below, you can see which supplies are present at a certain moment. Important to know here is, that if e.g. the 3V3 detection fails (and thus error 8 is blinking) **and** the TV is restarted via SDM, the Stand-by Processor will enable the 3V3, but will not go to protection now. The TV will stay in this situation until it is reset (Mains/AC Power supply interrupted). Caution: in case the start up in this mode with a faulty FET 7U01 is done, you can destroy all IC's supplied by the +3V3, due to over voltage. It's recommended to measure first the FET 7U01 on short-circuit before activate SDM via the service pads.
When the TV is in protection state due to an error detected by main software (Mips protection) **and** SDM is activated via short cutting the service pads on the SSB, the TV starts up and ignores the error.
In this chassis only error 63 (power-ok) is a Mips protection and already displays the failure via blinking LED.

The abbreviations "SP" and "MP" in the figures stand for:
- SP: protection or error detected by the **S**tand-by **P**rocessor.
- MP: protection or error detected by the Mips **M**ain **P**rocessor.



In US region, hibernate state and tact switch are not available.
Here the local keyboard tact switch acts as standby button.

H_16770_116.eps
270307

Figure 5-2 Transition diagram

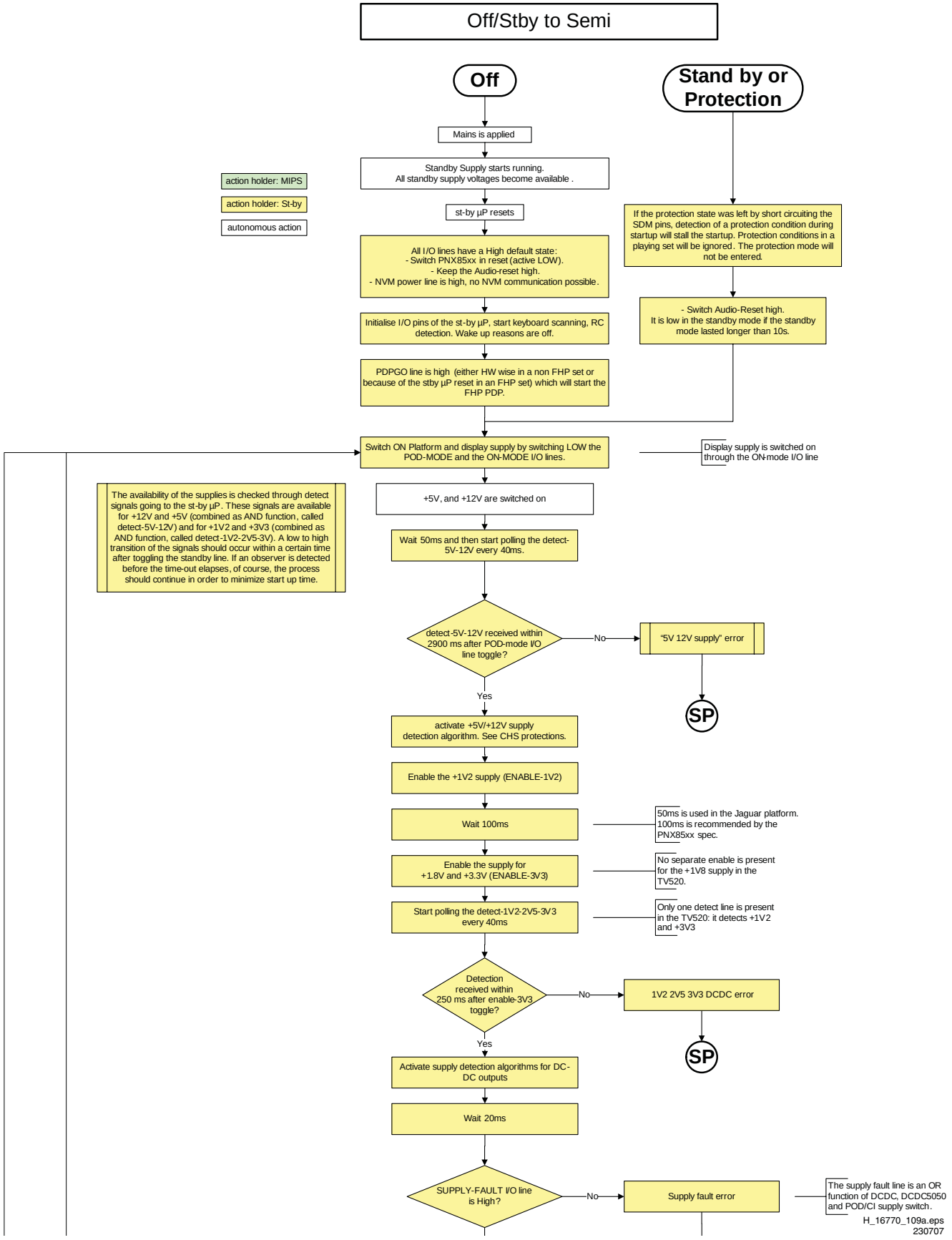


Figure 5-3 "Off" to "Semi Stand-by" flowchart (part 1)

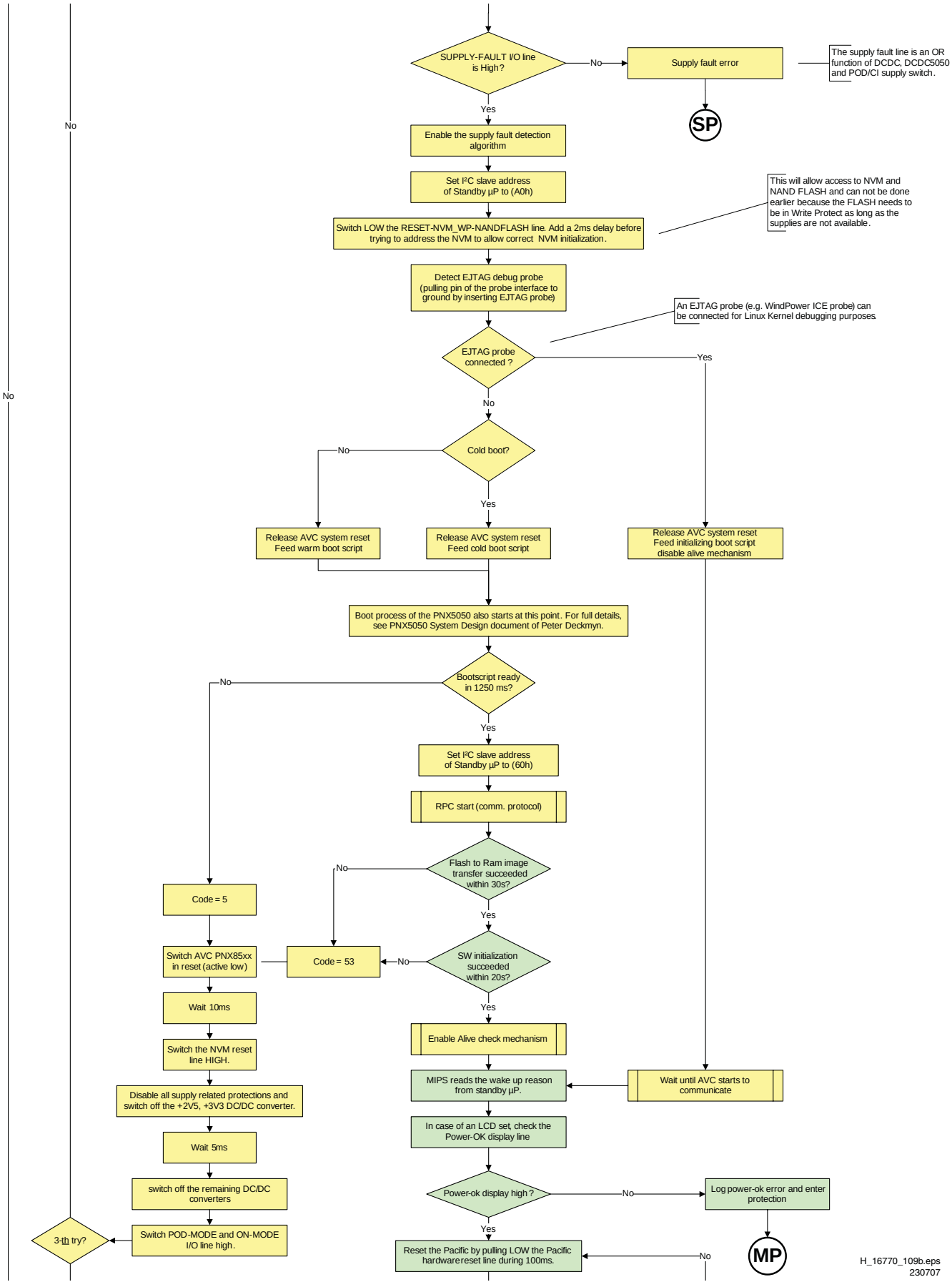


Figure 5-4 “Off” to “Semi Stand-by” flowchart (part 2)

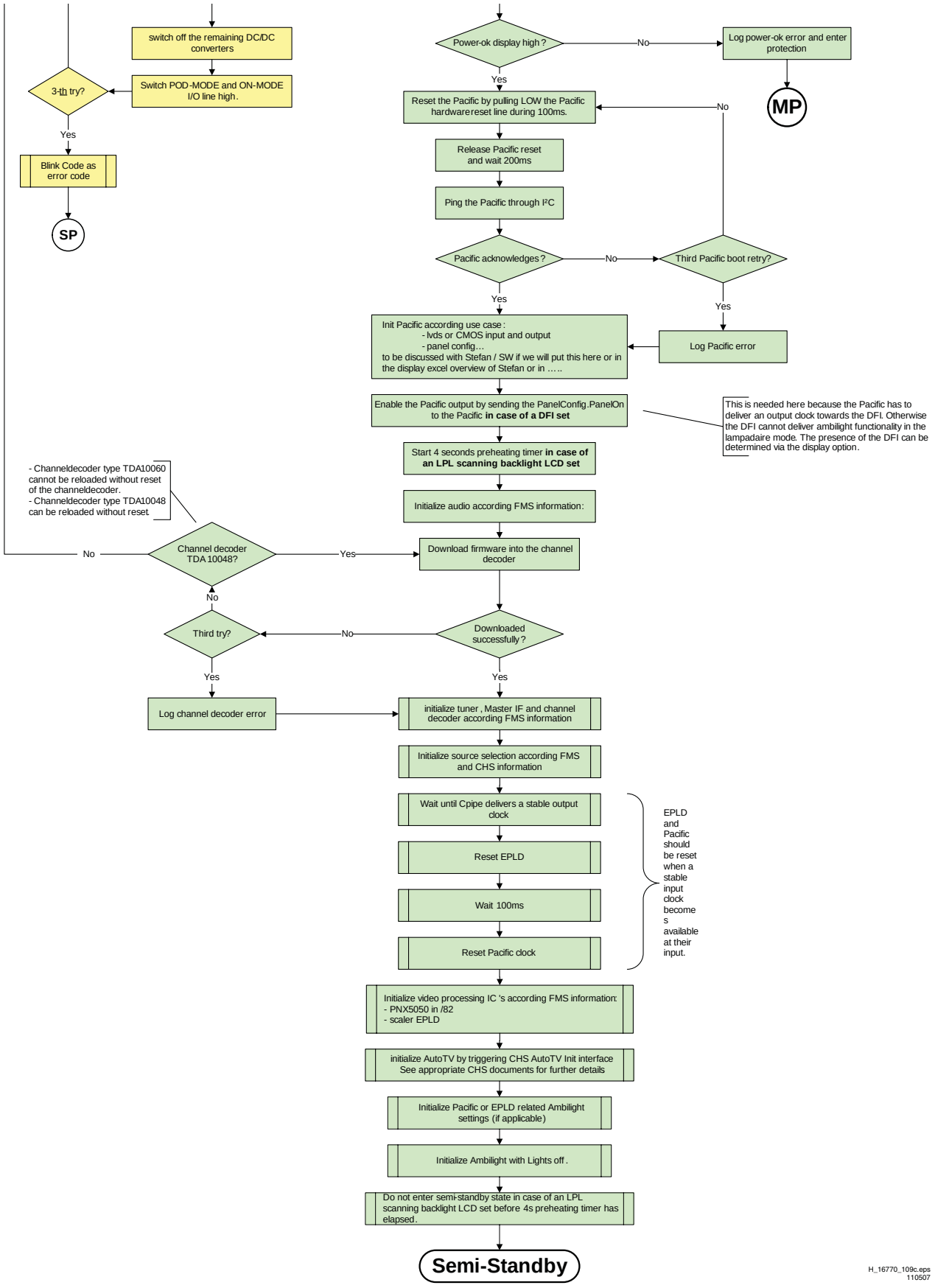


Figure 5-5 “Off” to “Semi Stand-by” flowchart (part 3)

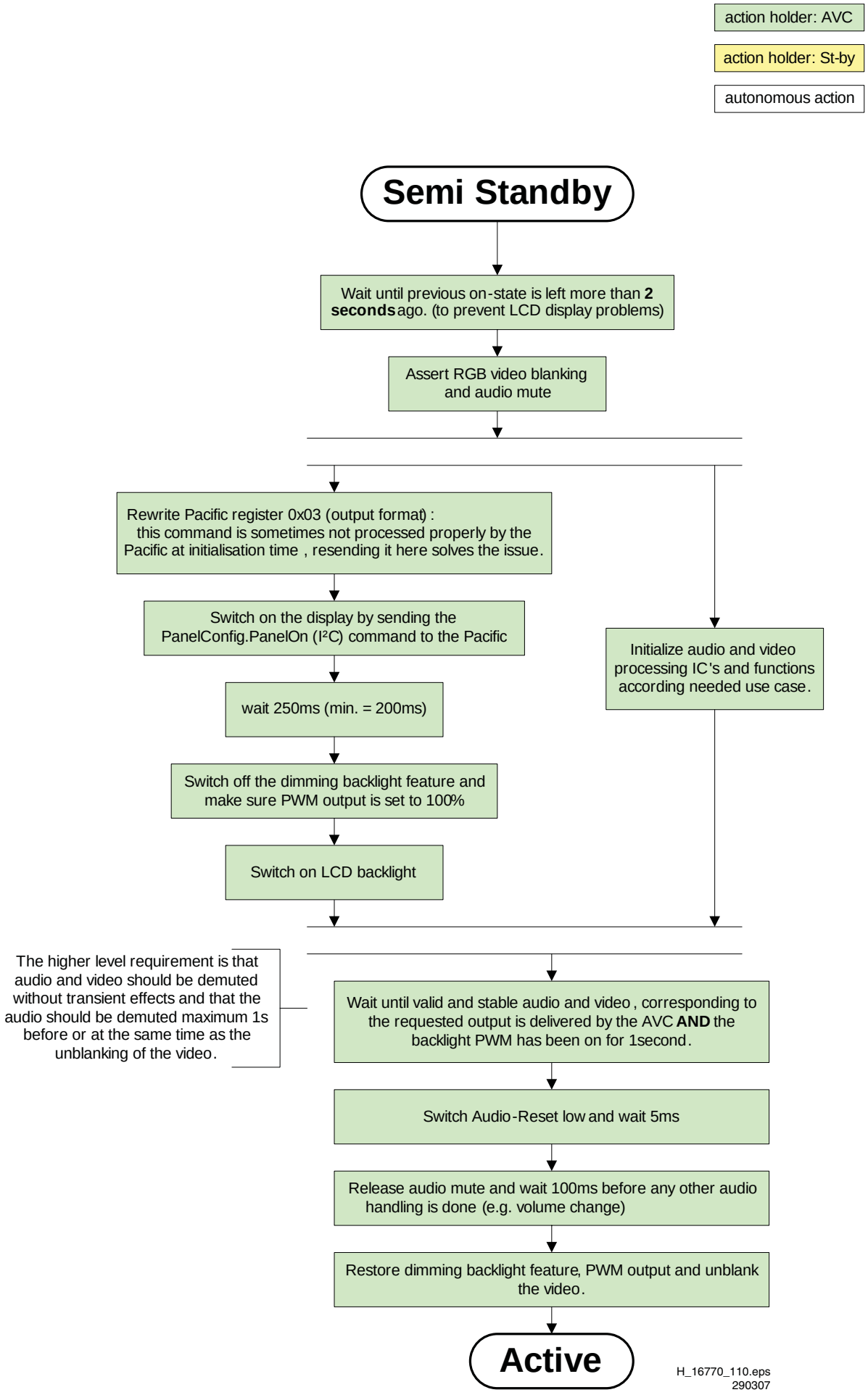


Figure 5-6 "Semi Stand-by" to "Active" flowchart non DFI (50/60 Hz) preheat

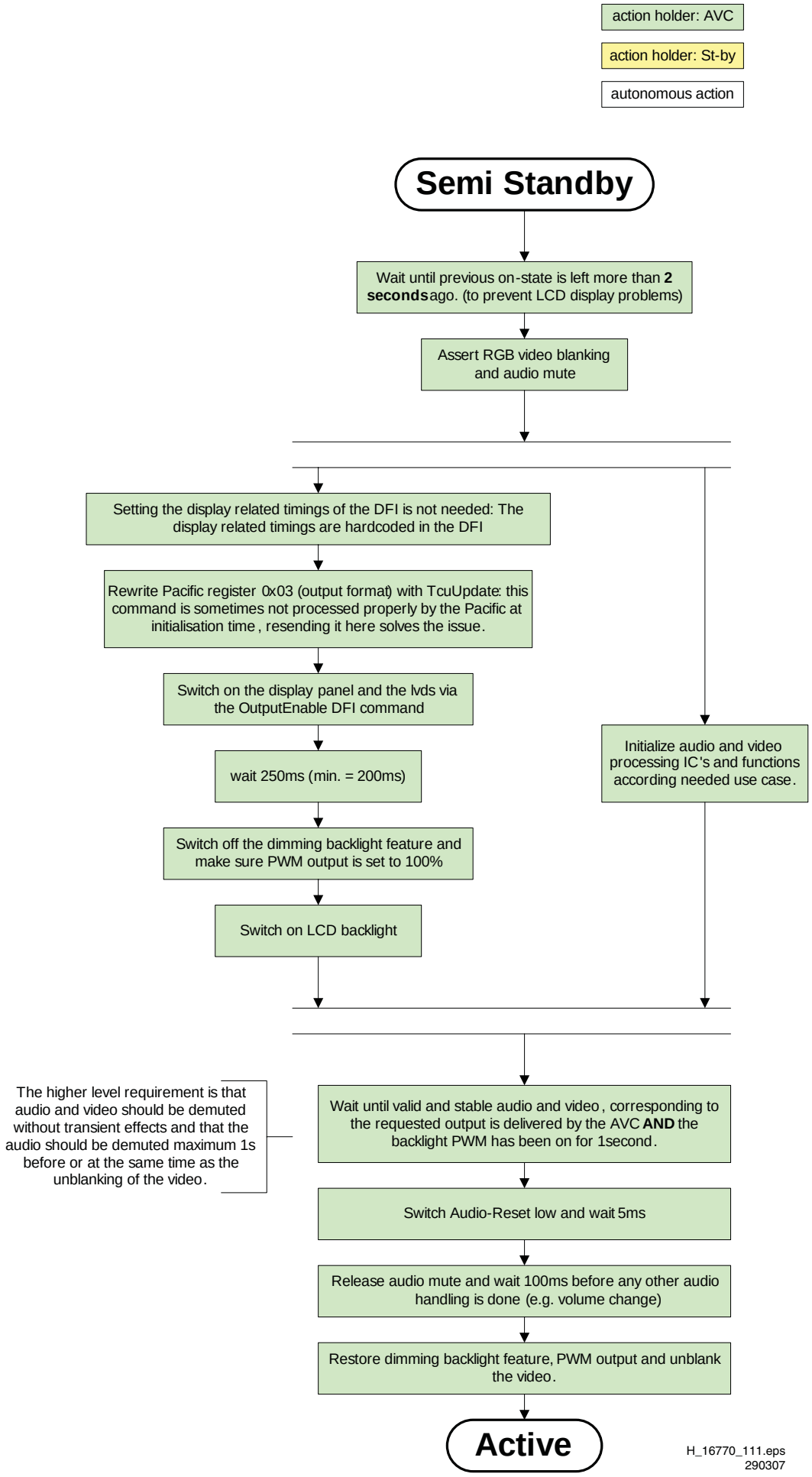


Figure 5-7 "Semi Stand-by" to "Active" flowchart DFI (100/120 Hz) preheat

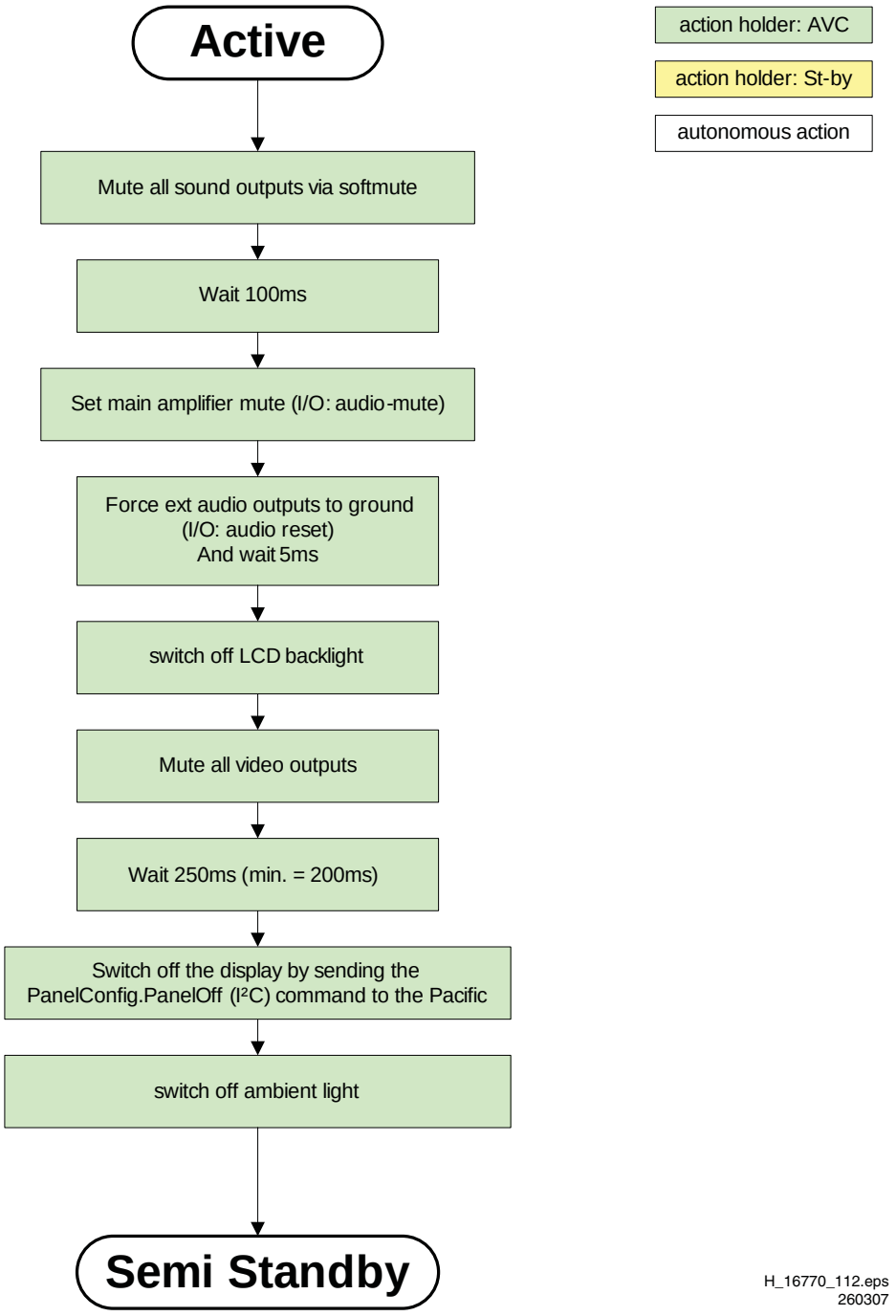


Figure 5-8 “Active” to “Semi Stand-by” flowchart

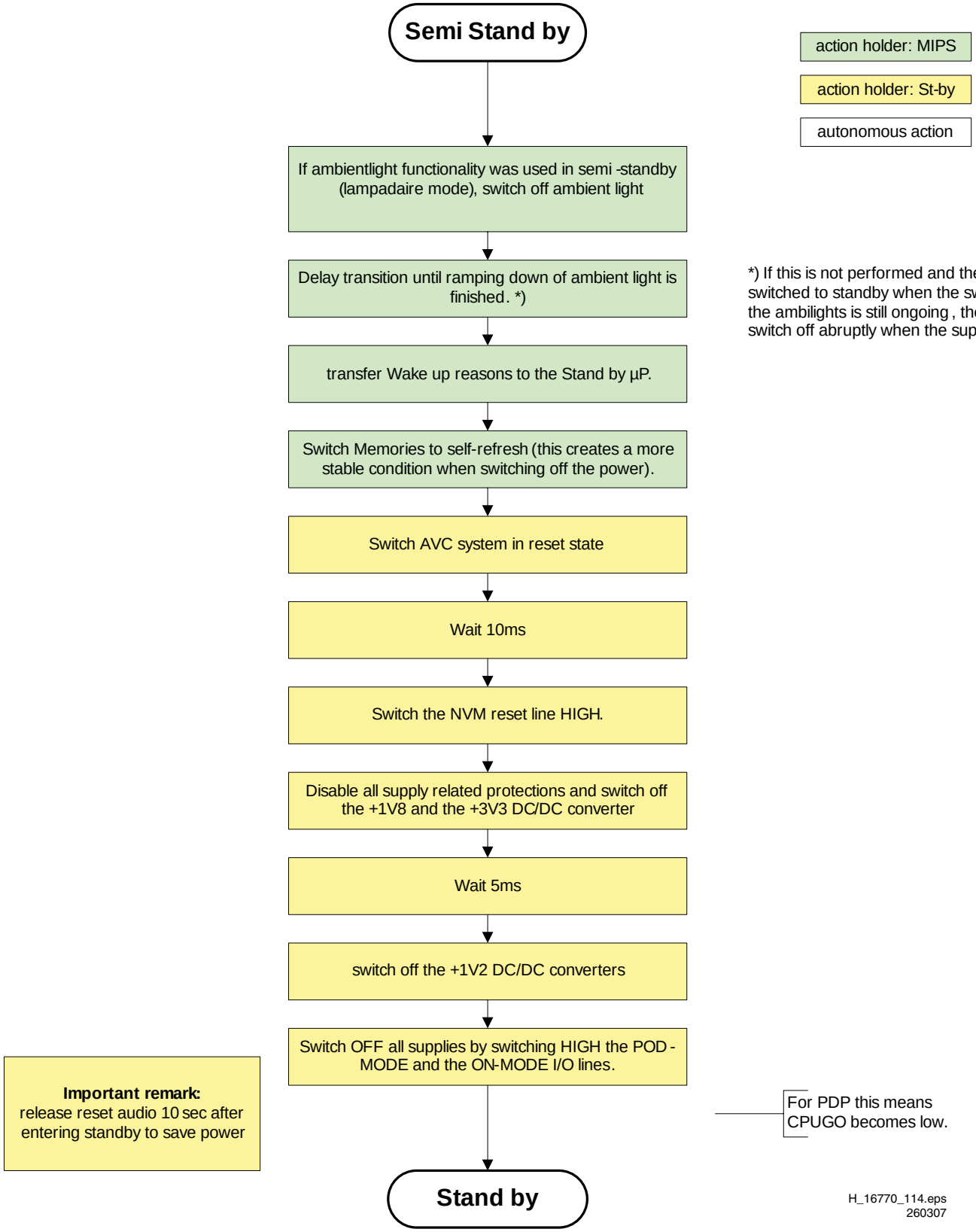


Figure 5-9 “Semi Stand-by” to “Stand-by” flowchart

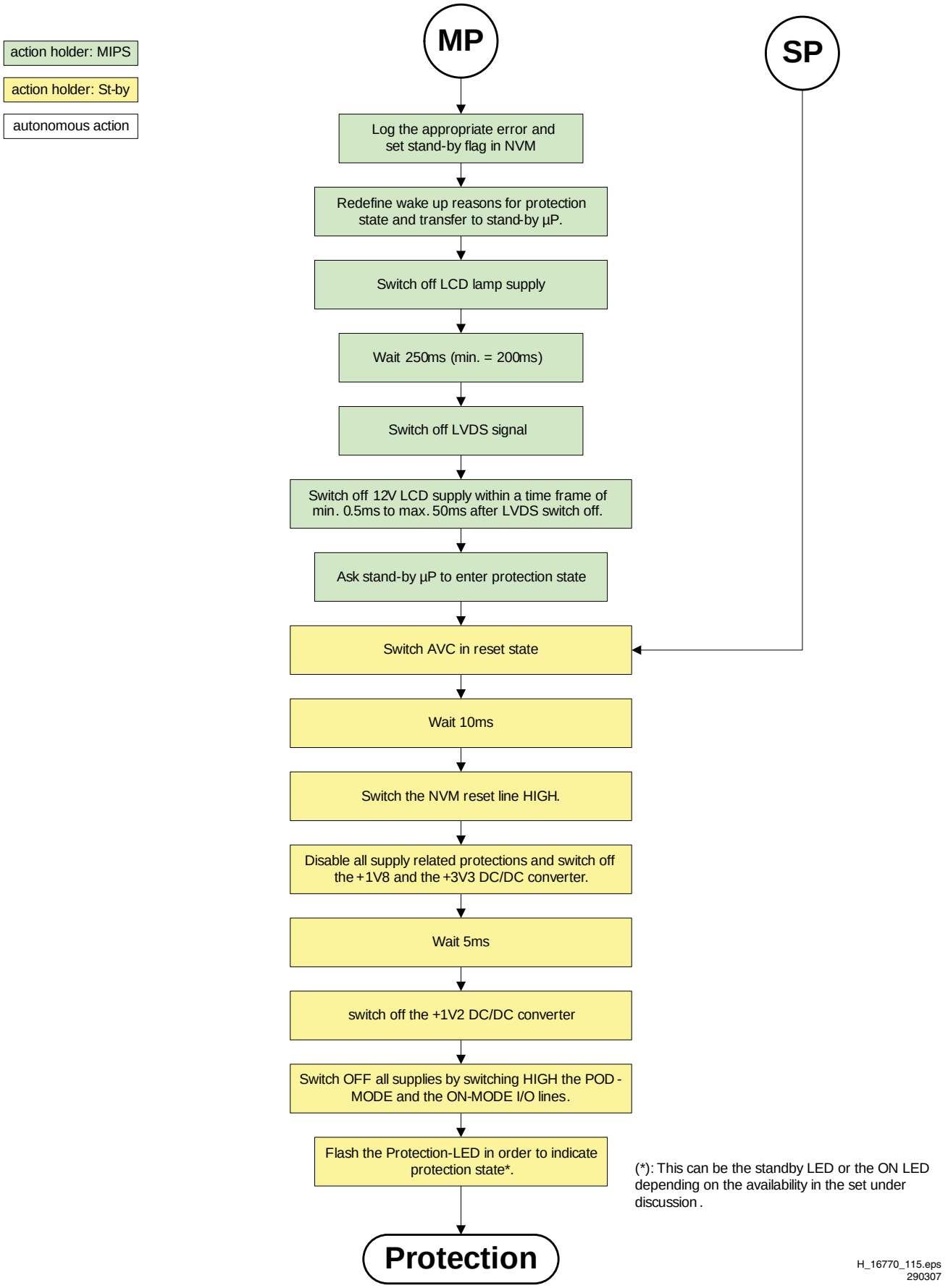


Figure 5-10 "Protection" flowchart

5.4 Service Tools

5.4.1 ComPair

Introduction

ComPair (Computer Aided Repair) is a Service tool for Philips Consumer Electronics products. and offers the following:

1. ComPair helps you to quickly get an understanding on how to repair the chassis in a short and effective way.
2. ComPair allows very detailed diagnostics and is therefore capable of accurately indicating problem areas. You do not have to know anything about I2C or UART commands yourself, because ComPair takes care of this.
3. ComPair speeds up the repair time since it can automatically communicate with the chassis (when the uP is working) and all repair information is directly available.
4. ComPair features TV software upgrade possibilities.

Specifications

ComPair consists of a Windows based fault finding program and an interface box between PC and the (defective) product. The (new) ComPair II interface box is connected **to the PC** via an USB cable. For the TV chassis, the ComPair interface box and the TV communicate via a bi-directional cable via the service connector(s).

How to Connect

This is described in the ComPair chassis fault finding database.

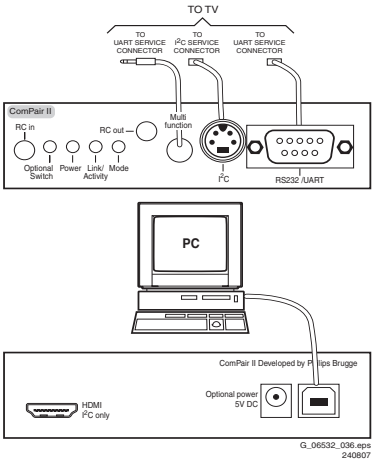


Figure 5-11 ComPair II interface connection

Caution: It is compulsory to connect the TV to the PC as shown in the picture above (with the ComPair interface in between), as the ComPair interface acts as a level shifter. If one connects the TV directly to the PC (via UART), ICs will be blown!

How to Order

ComPair II order codes:

- ComPair II interface: 3122 785 91020.
- ComPair32 CD (update): 3122 785 60160.
- ComPair I^2C interface cable: 3122 785 90004 (to be used with chassis L01, A02, A10, EMx, TPM1.xA, etc ...).
- ComPair I^2C interface extension cable: 3139 131 03791 (to be used with chassis L01, A02, A10, L04, LC4, LC7.1, LC7.2).
- ComPair UART interface cable: 3122 785 90630 (to be used with chassis LC4, EJ3, BJ2, BL2, BP2, ...).
- ComPair RS232 cable: 3104 311 12742 (to be used with chassis Q52x).
- ComPair I^2C interface cable (3.5 mm Jack-to-SVHS plug): 9965 100 07325 (to be used with chassis LC7.5).
  Note: For I2C it is **compulsory** to use this particular cable.
- ComPair UART interface cable (3.5 mm Jack-to-Jack): 3138 188 75051 (to be used with chassis LC7.5).

  Note: For UART it is also allowed to use a standard “Jack-to-Jack” cable.

Note: If you encounter any problems, contact your local support desk.

5.4.2 LVDS Tool

Support of the LVDS Tool has been discontinued.

5.5 Error Codes

5.5.1 Introduction

The error code buffer contains all detected errors since the last time the buffer was erased. The buffer is written from left to right, new errors are logged at the left side, and all other errors shift one position to the right.
When an error occurs, it is added to the list of errors, provided the list is not full. When an error occurs and the error buffer is full, then the new error is not added, and the error buffer stays intact (history is maintained).
To prevent that an occasional error stays in the list forever, the error is removed from the list after more than 50 hrs. of operation.
When multiple errors occur (errors occurred within a short time span), there is a high probability that there is some relation between them.

Basically there are three kinds of errors:

- **Errors detected by the Stand-by software.** These errors will always lead to protection and an automatic start of the blinking LED for the concerned error (see paragraph “The Blinking LED Procedure”). In these cases SDM can be used to start up (see chapter “Stepwise Start-up”). Note that it can take up to 90 seconds before the TV goes to protection and starts blinking the error (e.g. error 53)
- **Errors detected by main software that lead to protection.** In this case the TV will go to protection and the front LED should also blink the concerned error. See also paragraph “Error Codes” -> “Error Buffer” -> “Extra Info”.
- **Errors detected by main software that do not lead to protection.** In this case the error will be logged into the error buffer and can be read out via ComPair, via blinking LED method, or in case you have picture, via SAM.

5.5.2 How to Read the Error Buffer

Use one of the following methods:

- On screen via the SAM (only if you have a picture). E.g.:
  - **00 00 00 00 00**: No errors detected
  - **06 00 00 00 00**: Error code 6 is the last and only detected error
  - **09 06 00 00 00**: Error code 6 was first detected and error code 9 is the last detected error
- Via the blinking LED procedure (when you have no picture). See next paragraph.
- Via ComPair.
- Via CSM. when CSM is activated the blinking LED procedure will start and the CSM content will be written to a USB stick (if present).

5.5.3 How to Clear the Error Buffer

Use one of the following methods:

- By activation of the “RESET ERROR BUFFER” command in the SAM menu.
- With a normal RC, key in sequence “MUTE” followed by “062599” and “OK”.
- If the content of the error buffer has not changed for 50+ hours, it resets automatically.

5.5.4 Error Buffer

In case of non-intermittent faults, clear the error buffer before you begin the repair (**before** clearing the buffer, write down the content, as this history can give you significant information). This to ensure that old error codes are no longer present.
If possible, check the entire contents of the error buffer. In some situations, an error code is only the result of another error code and not the actual cause (e.g., a fault in the protection detection circuitry can also lead to a protection).
There are several mechanisms of error detection:

- Via error bits in the status registers of ICs.
- Via polling on I/O pins going to the stand-by processor.
- Via sensing of analog values on the stand-by processor or the PNX85xx.
- Via a “not acknowledge” of an I²C communication

Take notice that some errors need more than 90 seconds before they start blinking or before they will be logged. So in case of problems wait 2 minutes from start-up onwards, and then check if the front LED is blinking or if an error is logged.

Table 5-2 Error code overview

Error	Description	Error/Prot	Detected by	Device	Result
3	I²C3	E	MIPS	PNX85xx	Error logged
5	PNX85xx doesn’t boot	E	Stby P	PNX85xx	Error blinking
6	5V, 12V supply	P	Stby P	/	Protection + Error blinking
8	1V2, 1V4, 2V5, 3V3 supply	P	Stby P	/	Protection + Error blinking
9	Supply fault	P	Stby P	/	Protection + Error blinking
11	I²C-MUX1	E	MIPS	PCA9540	Error logged
12	I²C-MUX2	E	MIPS	PCA9540	Error logged
23	HDMI multiplexer	E	MIPS	AD8190	Error logged
24	I²C switch	E	MIPS	PCA9540	Error logged
26	Master IF	E	MIPS	TDA9898/9897/9890	Error logged
28	MOP FPGA 1080P	E	MIPS	EP2CXXF484C7N	Error logged
34	Tuner	E	MIPS	/	Error logged
37	Channel decoder	E	MIPS	TDA10060	Error logged
46	Pacific	E	MIPS	/	Error blinking + Error logged
53	PNX 8535 doesn’t boot (SW cause)	E	Stby P	PNX85xx	Error blinking
63	Power OK	P	MIPS	/	Error logged in case of a PDP set Protection in case of an LCD set
65	DFI	E	MIPS	/	Error blinking + Error logged

Extra Information

- **Rebooting.** When a TV is constantly rebooting due to internal problems, most of the time no errors will be logged or blinked. This rebooting can be recognized via a ComPair interface and Hyperterminal (for Hyperterminal settings, see paragraph “Stand-by software upgrade). You will see that the loggings which are generated by the main software keep continuing. In this case (rebooting) diagnose has to be done via ComPair.
- **Error 3 (I²C bus 3 blocked).** At the time of release of this manual, this error was not working as expected (error 3 is logged and can be read out). Current situation: when this error occurs the TV will constantly reboot due to the blocked bus. The best way for further diagnosis here, is to use ComPair(e.g. read out the NVM content). Instead of error “3” it’s possible you will see error “2” in the error buffer.
- **Error 5 (PNX85xx doesn’t boot).** This error will point to a severe hardware problem around the PNX85xx(supplies not OK, PNX 8535 completely dead, I²C link between PNX and Stand-by Processor broken, etc...).When error 5 occurs it is also possible that I²C2 bus is blocked (NVM). I²C2 can be indicated as the following in the schematics: SCL-UP-MIPS, SDA-UP-MIPS, SCL-SLAVE, SDA-SLAVE, SCL-2 or SDA-2.
- **Error 11 (I²C MUX1).** Indicates a blocked (short-circuited) I²C-MUX1 bus. At the time of release of this manual, this error was not working as expected. Current situation: when this error occurs the TV will constantly reboot due to the blocked bus. The best way for further diagnosis here, is to use ComPair (e.g. read out the NVM content).
- **Error 12 (I²C MUX2).** Indicates a blocked (short circuited) I²C-MUX2 bus. At the time of release of this manual, this error was not working as expected. Current situation: when this error occurs the TV will constantly reboot due to the blocked bus. The best way for further diagnosis here, is to use ComPair (e.g. read out the NVM content).
- **Error 24 (I²C switch).** Indicates a problem with the I²C switch.
- **Error 28 (MOP).** Here you can activate the SDM/CSM mode and check for error 28 via the blinking LED procedure. Otherwise use ComPair for further diagnosis (e.g. read out the NVM content).
  Note that it can takes several minutes before error 28 will be logged.
- **Error 37 (Channel decoder).** When this error occurs there probably will be no picture and sound available, the best way for further diagnosis is to use ComPair (e.g. read out the NVM content). As a side effect of error 37 it’s possible that error 4 (no existing error) is also logged.
- **Error 46 (Pacific 3).** When there is an actual problem with or around the Pacific during start-up you will have no picture and error 46 will be blinked via the blinking LED procedure. For further diagnosis you can always dump the CSM content on USB stick (see CSM) or use ComPair.
- **Error 53.** This error will indicate that the PNX85xx has started to function (by reading his boot script, if this would have failed, error 5 would blink) but initialization was never completed because of hardware peripheral problems (NAND flash,...) or software initialization problems. Possible cause could be that there is no valid software loaded (try to upgrade to the latest main software version). Note that it takes 90 seconds before the TV blinks error 53 in this case.
- **Error 63 (POWER OK).** When this error occurs, it means that the POWER-OK line did not became “high”. This error is only applicable for TV’s with a LCD display. For PDP displays there will be no protection during a POWER-OK line failure, but error 63 will be logged in the error buffer. Caution: in case a PDP TV ends up into power-ok protection, it can indicate that the display option code is set

to “LCD”. To change the display option code to “PDP” you need to activate SDM via the service pads. Then change the display option code blindly via a standard RC: key in the code “062598” directly followed by the “MENU” button and “XXX” (where XXX is the 3 digit decimal display option code as mentioned in figure “Display option code overview”.

- **Error 65 (DFI error).** When this error occurs it means that there is a problem with the I^2C communication towards the MOP on the DFI panel.

5.6 The Blinking LED Procedure

5.6.1 Introduction

The blinking LED procedure can be split up into two situations:
- Blinking LED procedure in case of a protection. In this case the error is automatically blinked. This will be only one error, namely the one that is causing the protection. Therefore, you do not have to do anything special, just read out the blinks. A long blink indicates the decimal digit, a short blink indicates the units.
- Blinking LED procedure in the “on” state. Via this procedure, you can make the contents of the error buffer visible via the front LED. This is especially useful for fault finding, when there is no picture.

When the blinking LED procedure is activated in the “on” state, the front LED will show (blink) the contents of the error-buffer. Error-codes > 10 are shown as follows:
1. “n” long blinks (where “n” = 1 - 9) indicating decimal digit,
2. A pause of 1.5 s,
3. “n” short blinks (where “n”= 1 - 9),
4. A pause of approx. 3 s,
5. When all the error-codes are displayed, the sequence finishes with a LED blink of 3 s,
6. The sequence starts again.

Example: Error 12 8 6 0 0.
After activation of the SDM, the front LED will show:
1. 1 long blink of 750 ms (which is an indication of the decimal digit) followed by a pause of 1.5 s,
2. 2 short blinks of 250 ms followed by a pause of 3 s,
3. 8 short blinks followed by a pause of 3 s,
4. 6 short blinks followed by a pause of 3 s,
5. 1 long blink of 3 s to finish the sequence,
6. The sequence starts again.

5.6.2 How to Activate

Use one of the following methods:
- **Activate the SDM or CSM.** The blinking front LED will show the entire contents of the error buffer (this works in “normal operation” mode).
- **Transmit the commands “MUTE” - “062500” - “OK” with a normal RC.** The complete error buffer is shown. Take notice that it takes some seconds before the blinking LED starts.
- **Transmit the commands “MUTE” - “06250x” - “OK” with a normal RC** (where “x” is a number between 1 and 5). When x= 1 the last detected error is shown, x= 2 the second last error, etc.... Take notice that it takes some seconds before the blinking LED starts.

5.7 Protections

5.7.1 Software Protections

Most of the protections and errors use either the stand-by microprocessor or the Mips controller as detection device. Since in these cases, checking of observers, polling of ADCs, filtering of input values are all heavily software based, these protections are referred to as software protections.
There are several types of software related protections, solving a variety of fault conditions:
- **Protections related to supplies:** check of the 12V, +5V, +1V2, +1V4, 2V5 and +3V3.
- **Protections related to breakdown of the safety check mechanism.** E.g. since the protection detections are done by means of software, failing of the software will have to initiate a protection mode since safety cannot be guaranteed any more.

Remark on the Supply Errors
The detection of a supply dip or supply loss during the normal playing of the set does not lead to a protection, but to a cold reboot of the set. If the supply is still missing after the reboot, the TV will go to protection.

Protections during Start-up
During TV start-up, some voltages and IC observers are actively monitored to be able to optimize the start-up speed, and to assure good operation of all components. If these monitors do not respond in a defined way, this indicates a malfunction of the system and leads to a protection. As the observers are only used during start-up, they are described in the start-up flow in detail (see paragraph “Stepwise Start-up”).

5.7.2 Hardware Protections

The only real hardware protection in this chassis is in case of an audio problem, the audio protection circuit will switch off immediately the supply of the SSB. The supply will buzz during the protection and +12VS drops to approx. 5.5 V, +5V Stand-by to approx. to 1.9 V. Other indication of the audio protection is that the red LED lights up only half.

Repair Tips
- It is also possible that you have an audio DC protection because of an interruption in one or both speakers (the DC voltage that is still on the circuit cannot disappear through the speakers). Caution: (dis)connecting the speaker wires during the ON state of the TV at high volume can damaged the audio amplifier.

5.8 Fault Finding and Repair Tips

Read also paragraph “Error Codes” - “Extra Info”.

5.8.1 Ambilight

Due to the degeneration process off the ambilights, it is recommended to change both ambilight units in case one unit needs to be repaired.

5.8.2 Audio Amplifier

It is recommended to replace all components at once 7D06, 7D09, 3D01, 3D25 when a defect FET 7D10 need to be fixed. For the left channel (defect FET 7D35) of the audio amplifier replace all components like 7D31, 7D34, 3D11, 3D28

5.8.3 CSM

When you activate CSM and there is a USB stick connected to the TV, the software will dump the complete CSM content to the USB stick. The file (Csm.txt) will be saved in the root of your USB stick. If this mechanism works you can conclude that a large part of the operating system is already working (Mips, USB...)

5.8.4 DC/DC Converter

Introduction

- The best way to find a failure in the DC-DC converters is to check their starting-up sequence at power-on via the mains cord, presuming that the stand-by μP is operational.
- If the input voltage of DC-DC converters is around 12.7V (measured on decoupling capacitors 2U03/2U93/2U6S and 2U6R) and the enable signals are low (active) then the output voltages should have their normal values.+12V and +5V-POD supplies start-up first (enabled by POD-MODE signal from the stand-by microprocessor). There is a supplementary condition for +12V to start-up: if +5V-POD doesn't start up due to a local defect then +12V will not be available, as well.+5V-ON supply is enabled by the ON-MODE signal (coming also from the stand-by microprocessor) and is coming up a little bit later (20ms) due to the slower rise time needed to charge the USB decoupling capacitor 2N31. +1V2 supply starts-up when +12V appears, then at least 100ms later, +1V8, +2V5 and +3V3 will be activated via ENABLE-3V3 signal from the stand-by microprocessor.If +12V value is less than 10V then the last enumerated voltages will not show-up due to the under-voltage detection circuit 6U10 + 7U10 and surrounding components. Furthermore, if +12V is less than 8V then also +1V2 will not be available. The third dc-dc convertor that delivers +1V4 out of +12V is started up when the ENABLE-1V2 becomes active (low) and +12V is present. The +Vtun generator (present only for the analog version of China platforms) will generate +33V for the analog tuner as soon as the 12V/3.3V DC-DC converter will start to operate.
- The consumption of controller IC 7U00 is around 19mA (that means almost 200mV drop voltage across resistor 3U01) and the consumption of controller IC 7U64 is around 12mA.
- The current capability of DC-DC converters is quite high (short-circuit current is 7 to 10A), therefore if there is a linear integrated stabilizer that, for example delivers 1.8V from +3V3 with its output overloaded, the +3V3 stays usually at its normal value even though the consumption from +3V3 increases significantly.
- The +1V8 and +2V5 supply voltages are obtained via linear stabilizer made with discrete components that can deliver a lot of current, therefore in case +1V8 or +2V5 are short-circuited to GND then +3V3 will not have the normal value but much less.
- The SUPPLY-FAULT signal (active low) is an internal protection (error 9) of the DC-DC convertor and will occur if the output voltage of any DC-DC convertor is out of limits (10% of the normal value).

Fault Finding

- **Symptom:** +1V2 not present (even for a short while ~10ms)
  1. Check 12V availability (resistor 3U01, MOS-FETs 7U03 and 7U08), value of +12 V, +12 V switch (7U14 + 7U16 and surrounding components) and +5V-POD.
  2. Check the voltage on pin 9 (1.5V),
  3. Check for +1V2 output voltage short-circuit to GND that can generate pulsed over-currents 7...10 A through coil 5U02.
  4. Check the over-current detection circuit (2U20 or 3U40 interrupted).
- **Symptom:** +1V4 not present (even for a short while ~10ms) while +12V is ok (also across input capacitors 2U6S and 2U6R).
  1. Check resistor 3U7B and power MOS-FETs 7U61-1/2
  2. Check the voltage on pin 4(4V)
  3. Check enable signal ENABLE-1V2 (active low)
  4. Check for +1V4 output voltage short-circuit to GND that can generate pulsed over-currents 7...10A through coil 5U60
  5. Check the over-current detection reference (2U65 + 3U7C) and the boot components (2U66 + 6U60).
- **Symptom:** +1V2 present for about 100ms, +1V8, +2V5 and +3V3 not rising
  1. Check the ENABLE-3V3 signal (active LOW),
  2. Check the voltage on pin 8 (1.5V),
  3. Check the under-voltage detection circuit (the voltage on collector of transistor 7U10-1 should be less than 0.8V),
  4. Check for output voltages short-circuits to GND (+3V3, +2V5 and +1V8) that can generate pulsed over-currents 7...10A through coil 5U01,
  5. Check the over-current detection circuit (2U18 or 3U31 interrupted).
- **Symptom:** +1V2 OK, +2V5 and +3V3 present for about 100ms. **Possible cause:** SUPPLY-FAULT line stays low even though the +3V3 and +1V2 is available - the stand-by μP is detecting that and switching off all supply voltages.
  1. Check the drop voltage across resistor 3U01 or 3U7B (they could be too high, meaning a defective controller IC or MOS-FETs),
  2. Check if the boost voltage on pin 4 of controller IC 7U00 is less than 14V (should be 19V),
  3. Check if +1V2 or +3V3 are higher than their normal values - that can be due to defective DC feedback of the respective dc-dc convertor (ex.3U47, 3U77, 3U7L, 3U7J or 3U70).
- **Symptom:** +1V2, +1V4, +1V8, +2V5 or +3V3 shows a high level of ripple voltage (audible noise can come from the filtering coils 5U01, 5U02 or 5U60). Possible **cause:** instability of the frequency and/or duty cycle of a dc-dc converter or stabilizer.
  1. Check the resistor 3U32 and 3U7D, capacitors 2U17 and 2U19, input and output decoupling capacitors.
  2. Check a.c. feedback circuits (2U23+2U24+3U55+3U63 for +1V2, 2U6D+2U6E+2U6G+3U6A+3U7E for +1V4 and 2U07+2U08+3U17+3U24 for +3V3), compensation capacitors 2U25, 2U34, 2U36, 2U37, 2U40, 2U43, 2U68 and 2U6B.
- **Symptom:** +1V2, +1V4, +2V5 and +3V3 ok, no +Vtun (analog sets only). Possible **cause:** the "+VTUN GENERATOR" circuit (7U24+7U26+surroundings components) is defective: check transistor 7U24 (it has to have gate voltage pulses of about 10V amplitude and drain voltage pulses of about 35V amplitude) and surroundings components. A high consumption (more than 6mA) from +Vtun voltage can cause also +Vtun voltage to be too low or zero.

Note: when a pair of power MOSFETs(7U01+7U06, 7U03+7U08 or 7U61-1/2) becomes defective the controller IC 7U00 or 7U64 should be replaced as well.

5.8.5 Display Option code

Attention: In case you have replaced the SSB, always check the display option code in SAM, even if you have picture. With a wrong display option code it is possible that you will have picture, but in certain conditions you can have unwanted side-effects.

5.8.6 Exit "Factory Mode"

When an "F" is displayed in the screen's right corner, this means that the set is in "Factory" mode, and it normally happens after a new SSB has been mounted.
To exit this mode, push the "VOLUME minus" button on the TV's keyboard control for 5 seconds and restart the set.

5.8.7 Sanken display supply

The 47" sets in this chassis come with a Sanken buy-in supply. The result of a failing Sanken display supply, e.g. one of the

following voltages is missing: +400V, +12V or +24V, will lead to protection (blinking error 63). The TV is switched off.
When the primary circuit of the platform supply fails, there is a high possibility that the main fuse of the Sanken display supply will break. In this case the Sanken supply must not be replaced completely, just replace the Sanken main fuse and repair the platform supply. For safety reasons, make sure to use the correct fuse type.

5.8.8 SSB service supply connector

Connector 1B40 can be used to apply external supply (+12V and +5V). In this way you don't need 110 V AC mains supply for troubleshooting on the SSB. e.g. component level repair.

5.8.9 Tuner

For access to the components located under the tuner itself, you need to desolder the ground connections and bend the tuner up. To maintain a good performing tuner one should make a new ground connection to the SSB, for instance by use of a wire.

5.8.10 Upgrade EDID NVM

To upgrade the EDID NVM you must short circuit pin 7 of the EDID NVM to ground. Therefore some test points are foreseen (figure "EDID-NVM pins"). See ComPair for further instructions.

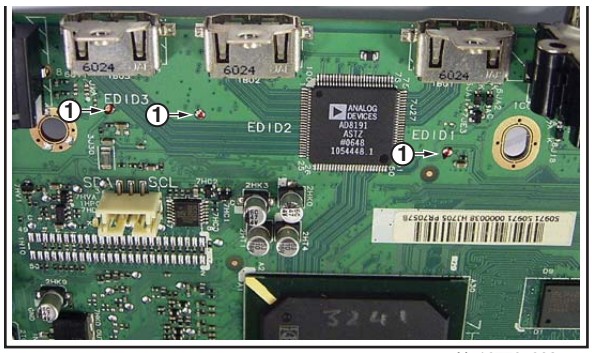


Figure 5-12 EDID-NVM pins

Table 5-3 NAND Flash content

NAND Flash content		One Zip					
		FUS UPG		Upgrade All UPG		Flash Utils UPG	
Partition	Content	erase	program	erase	program	erase	program
JFFS2 partition 1 (application read write data)	Channel table, EPG data		x	x	x		
JFFS2 partition 0 (Application read only once data)	HDMI keys, back up display file			x	x		
JFFS2 partition 0 (Application read only upgradable data)	wizard pictures, display file, cabinet file, upgrade assistant		x	x	x		
SQUASHFS partition	Main software (Mips) Linux structure (root file system)	x	x	x	x		
BFFS partition 2 (DVD OK)	Default software upgrade application TriMedia software boot batch file 2	x	x	x	x		
BFFS partition 1 (DVD cursor down)	Back up software upgrade application boot batch file 1 Linux kernel JETT: needed for ComPair			x	x	x	x
BFFS partition 0	Jaguar Boot loader boot batch file 0					x	x
Block 0	µBTM partition table						N

- The overview of the Nand Flash content shows the content of the different partitions. It also shows which part of the one-zip file erases and programs which part of the Nand Flash.
- Remark: the above does not mean that you can reprogram your HDMI keys with the UpgradeAll upg file from the one zip file. This can only be done in a secure environment (e.g. the factory).

5.9 Software Upgrading

5.9.1 Introduction

The set software and security keys are stored in a NAND-Flash, which is connected to the PNX85xx via the PCI bus.

It is possible **for the user** to upgrade the **main** software via the USB port. This allows replacement of a software image in a stand alone set, without the need of an E-JTAG debugger. A description on how to upgrade the main software can be found in chapter 3 "Directions For Use".

Important: When the NAND-Flash must be replaced, a new SSB must be ordered, due to the presence of the security keys!!! (copy protection keys, MAC address,...).
Perform the following actions after SSB replacement:
1. Set the correct option codes (see sticker inside the TV).
2. Update the TV software (see chapter 3 for instructions).
3. Perform the alignments as described in chapter 8 (section "Reset of Repaired SSB").
4. Check in CSM if the HDMI keys are valid.

For the correct order number of a new SSB, always refer to the Spare Parts list!

5.9.2 Main Software Upgrade

The software image resides in the NAND-Flash, and is formatted in the following way:

- The UpgradeAll upg file is only used in the factory.
- The FlashUtils upg file is only used by service centers which are allowed to do component level repair on the SSB.

Automatic Software Upgrade

In "normal" conditions, so when there is no major problem with the TV, the main software and the default software upgrade application can be upgraded with the AUTORUN.UPG(FUS part of the one-zip file: e.g. 3104 337 03801 _FUS _Q531U_ 0.37.0.0_commercial.zip). This can also be done by the customers themselves, but they will have to get their software from the commercial Philips website or via the Software Update Assistant in the user menu (see DFU). The AUTORUN.UPG file must be put in the root of your USB stick.
How to upgrade:

1. Copy "AUTORUN.UPG" to the root of your USB stick.
2. Insert USB stick in the side I/O while the set is in ON MODE. The set will restart and the upgrading will start automatically. As soon as the programming is finished, you'll get the message that you can remove your USB stick and restart the set.

Manual Software Upgrade

In case that the software upgrade application does not start automatically, you can also start it manually.
How to start the software upgrade application manually:

1. Disconnect the TV from the Mains/AC Power.
2. Press the "OK" button on a Philips DVD RC-6 remote control (it is also possible to use the TV remote in "DVD" mode). Keep the "OK" button pressed while reconnecting the TV to the Mains/AC Power.
3. The software upgrade application will start.

Attention!

In case that you have started the download application manually, the "AUTORUN.UPG" will not be recognized.
What to do in this case:

1. Create a directory "UPGRADES" on your USB stick.
2. Rename the "AUTORUN.UPG" to something else, e.g. to "software.upg". Don't use long or complicated names, keep it simple. Make sure that AUTORUN.UPG is no longer present in the root of your USB stick.
3. Copy the renamed upg file into this directory.
4. Insert USB stick in the side I/O.
5. The renamed upg file will be visible and selectable in the upgrade application.

Back up Software Upgrade Application

If the default software upgrade application does not start (could be due to a corrupted boot 2 sector) via the above described method, you can try to activate the "back up software upgrade application".
How to start the "back up software upgrade application" manually:

1. Disconnect the TV from the Mains/AC Power.
2. Press the "CURSOR DOWN" button on a Philips DVD RC-6 remote control (it is also possible to use the TV remote in "DVD" mode). Keep the "CURSOR DOWN" button pressed while reconnecting the TV to the Mains/AC Power.
3. The software upgrade application will start.

5.9.3 Stand-by Software Upgrade

There are two methods now to upgrade stand-by software:

Upgrade via USB

In this chassis it is possible to upgrade stand-by software via a USB stick. The method is similar to upgrading main software via USB.
Use the following steps:

1. Create a directory "UPGRADES" on your USB stick.
2. Copy the stand-by software (part of the one-zip file) into this directory.
3. Insert the USB stick into the TV.
4. Start the download application manually (see paragraph "Manual start of the Software Upgrade Application".
5. Select the appropriate file and press the red button to upgrade.

Upgrade via PC and ComPair interface

It will be possible to upgrade the Stand-by software via a PC and the ComPair interface. Check paragraph "ComPair" on how to connect the interface. To upgrade the Stand-by software, use the following steps:

1. Disconnect the TV from the Mains/AC Power.
2. Short circuit the SPI pins on the SSB (see figure "Service mode pads" earlier in this chapter).
3. Keep the SPI pins shortened while connecting the TV to the Mains/AC Power.
4. Release the short circuit after approx. two seconds.
5. Start up HyperTerminal (can be found in every Windows application via Programs -> Accessories -> Communications -> HyperTerminal). Use the following settings:
   - COM1
   - Bits per second = 38400 (9600)*
   - Data bits = 8
   - Parity = none
   - Stop bits = 1
   - Flow control = None
6. Press "Shift U" on your PC keyboard. You should now see the following info:
   - PNX2015 Loader V1.0
   - 19-09-2003
   - DEVID=0x05
   - Erasing
   - MCSUM=0x0000
   - =
7. If you do not see the above information restart the above procedure, and check your HyperTerminal settings and the connections between PC and TV.
8. Via "Transfer" -> "Send text file...", you can send the proper upgrade file to the TV (e.g. *.hex).
9. After successful programming, you must see the following information (this can take several minutes!):
   - DCSUM=0xC67E
   - :Ok
   - MCSUM=0xC67E
   - Programming
   - PCSUM=0xC67E
   - Finished
10. If you do not see this information, restart the complete procedure.
11. Close HyperTerminal.
12. Disconnect and connect Mains/AC Power again.

(*) When having problems with upgrading, use the values between brackets.

5.9.4 Content and Usage of the One-Zip Software File

Below you find a content explanation of the One-Zip file, and instructions on how and when to use it (or not).

1. **Ambilight_PRFAM_x.x.x.x.zip.** Not to be used by Service technicians.

2. **Cabinet_ACOUS_x.x.x.x.zip.** Not to be used by Service technicians.

3. **Ceisp2padII_P2PAD_x.x.x.x.zip**. Not to be used by Service technicians. For ComPair development only.

4. **Display_DISPT_x.x.x.x.zip.** Not to be used by Service technicians.

5. **EDID_Q531X_x.x.x.x.zip.** Contains the EDID content of the different EDID NVM's. See ComPair for further instructions. For sets with three HDMI connectors:
   - For HDMI 1 NVM, use "*port 1*.bin
   - For HDMI 2 NVM, use "*port 2*.bin
   - For HDMI 3 NVM, use "*port 3*.bin

6. **EJTAGDownload_Q531X_x.x.x.x.zip.** Only used by service centers which are allowed to do component level repair.

7. **Factory_Q531X_x.x.x.x_commercial.zip**. Only for production purposes, not to be used by Service technicians.

8. **FlashUtils_Q531X_x.x.x.x_commercial.zip.** Not to be used by Service technicians.

9. **FUS_Q531X_x.x.x.x_commercial.zip.** Contains the "AUTORUN.UPG" which is needed to upgrade the TV main software and the software download application.

10. **MOP_IACXX_x.x.x.x.zip**. Not to be used by Service technicians. A programmed MOP device can be ordered via your regional Service organization.

11. **OpenSourceFile_Q531X_x.x.x.x.zip.** Not to be used by Service technicians.

12. **Pacific3_P3FW0_x.x.x.x.zip.** Not to be used by Service technicians. A programmed PACIFIC device can be ordered via your regional Service organization.

13. **PQPrivate_U5207_x.x.x.x.zip.** Not to be used by Service technicians.

14. **PQPublic_U5207_x.x.x.x.zip.** Not to be used by Service technicians.

15. **ProcessNVM_Q531X_x.x.x.x.zip.** Default NVM content. Must be programmed via comPair.

16. **StandbySW_CFTxx_x.x.x.x_commercial.zip.** Contains the Stand-by software in "upg" and "hex" format.
    - The "StandbySW_xxxxx_prod.upg" file can be used to upgrade the Stand-by software via USB.
    - The "StandbySW_xxxxx.hex" file can be used to upgrade the Stand-by software via ComPair.
    -The files "StandbySW_xxxxx_exhex.hex" and "StandbySW_xxxxx_dev.upg" may not be used by Service technicians (only for development purposes).

17. **UpgradeAll_Q531X_x.x.x.x_commercial.zip.** Only for production purposes, not to be used by Service technicians.
    Caution: Never try to use this file, because it will overwrite the HDCP keys!!!

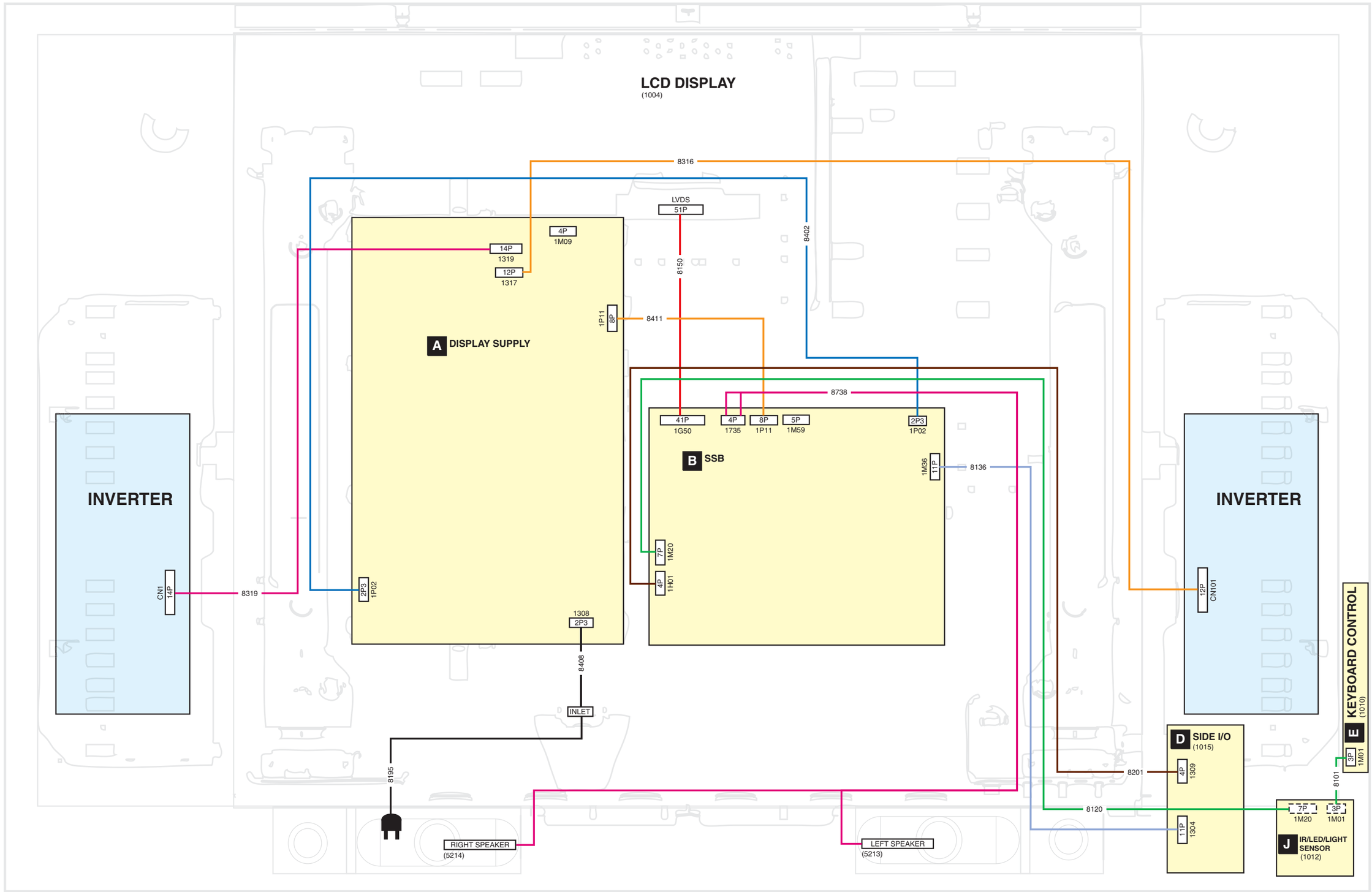
Personal Notes:

E_06532_012.eps
131004

6. Block Diagrams, Test Point Overview, and Waveforms

Wiring Diagram 42” LCD

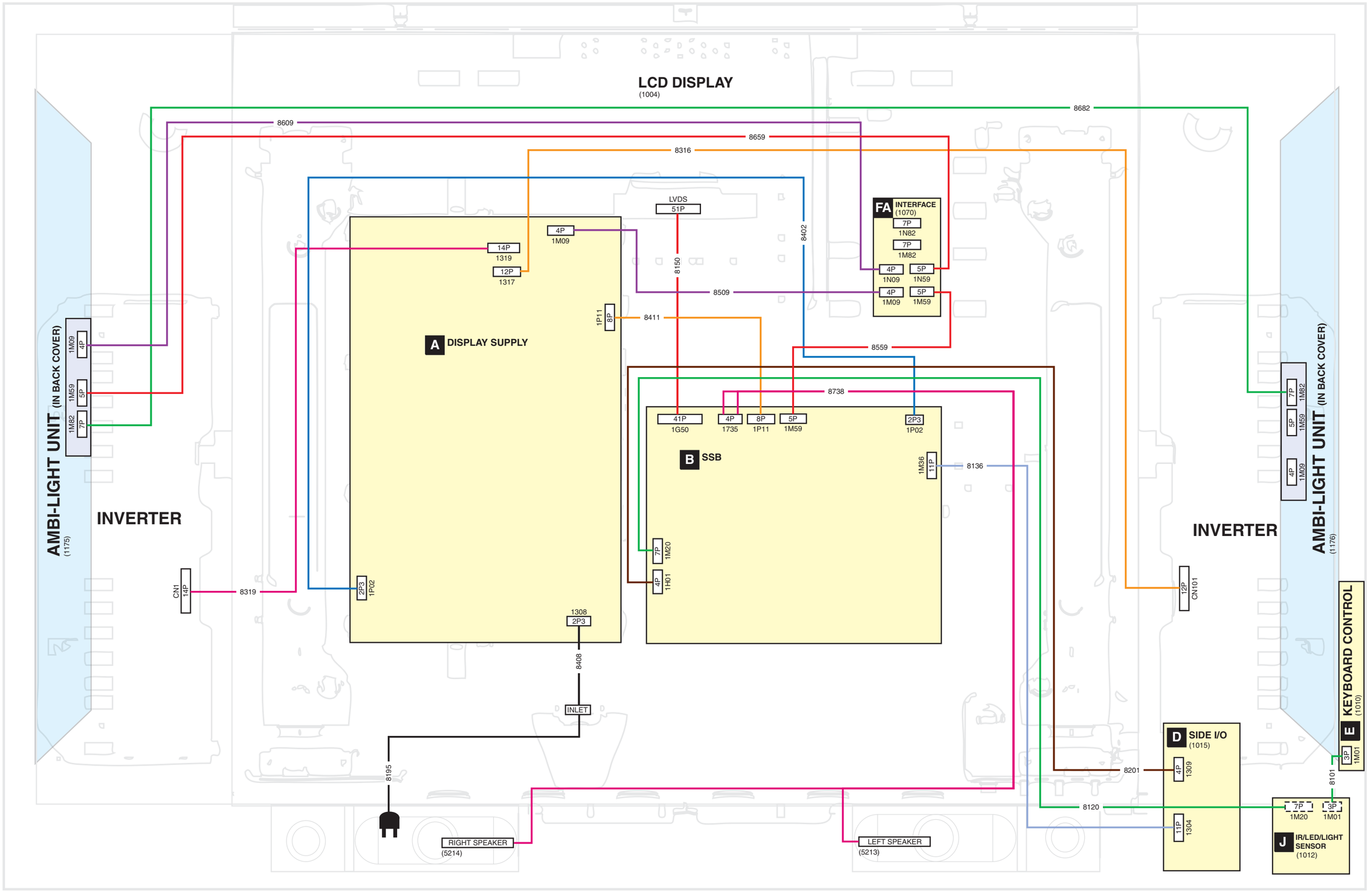
WIRING 42” LCD (STYLING ME7)



H_16770_066.eps
120707

Wiring Diagram 42” LCD + AmbiLight

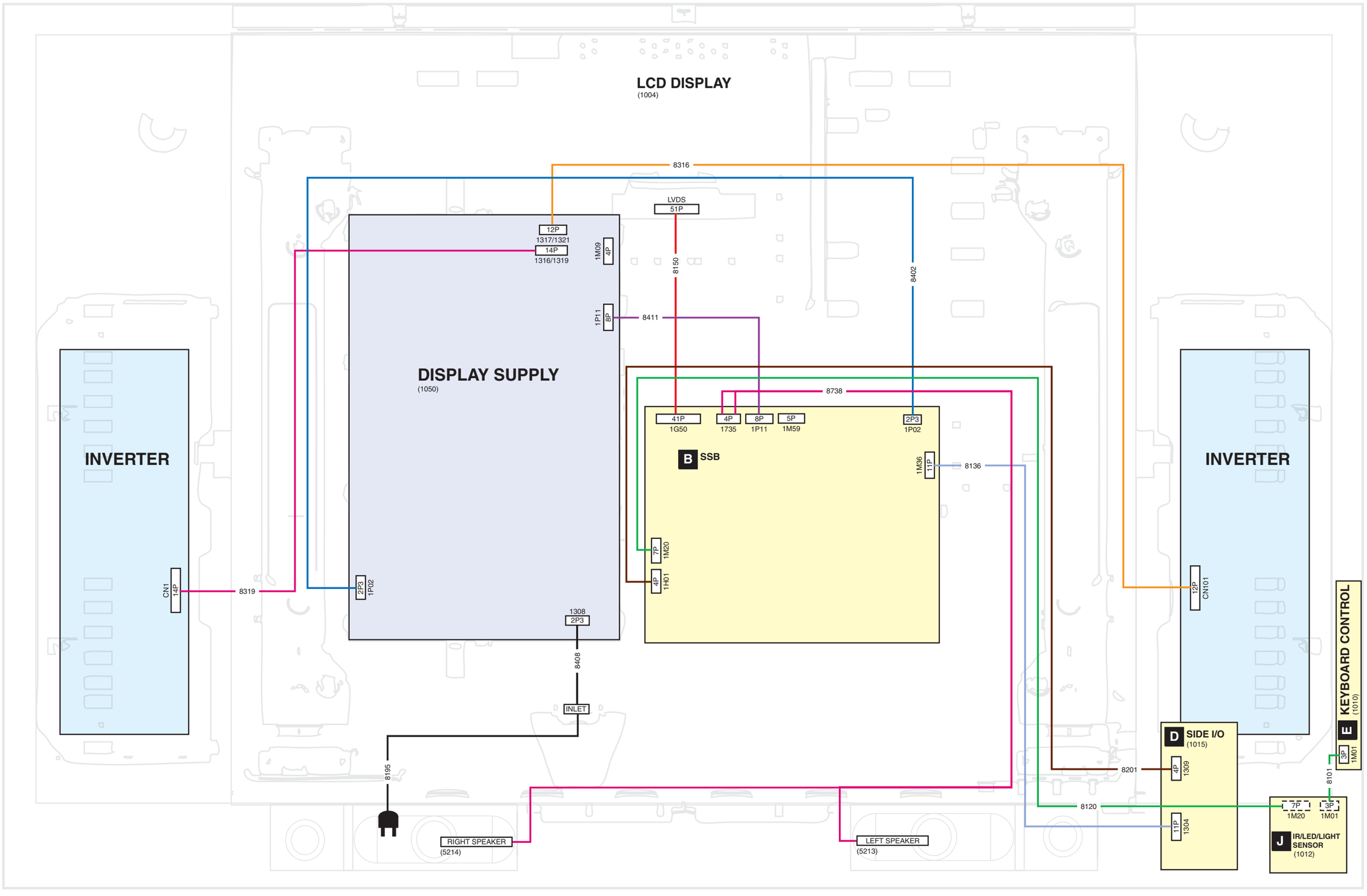
WIRING 42” LCD + AMBI LIGHT (STYLING ME7)



H_16770_065.eps
120707

Wiring Diagram 47” LCD

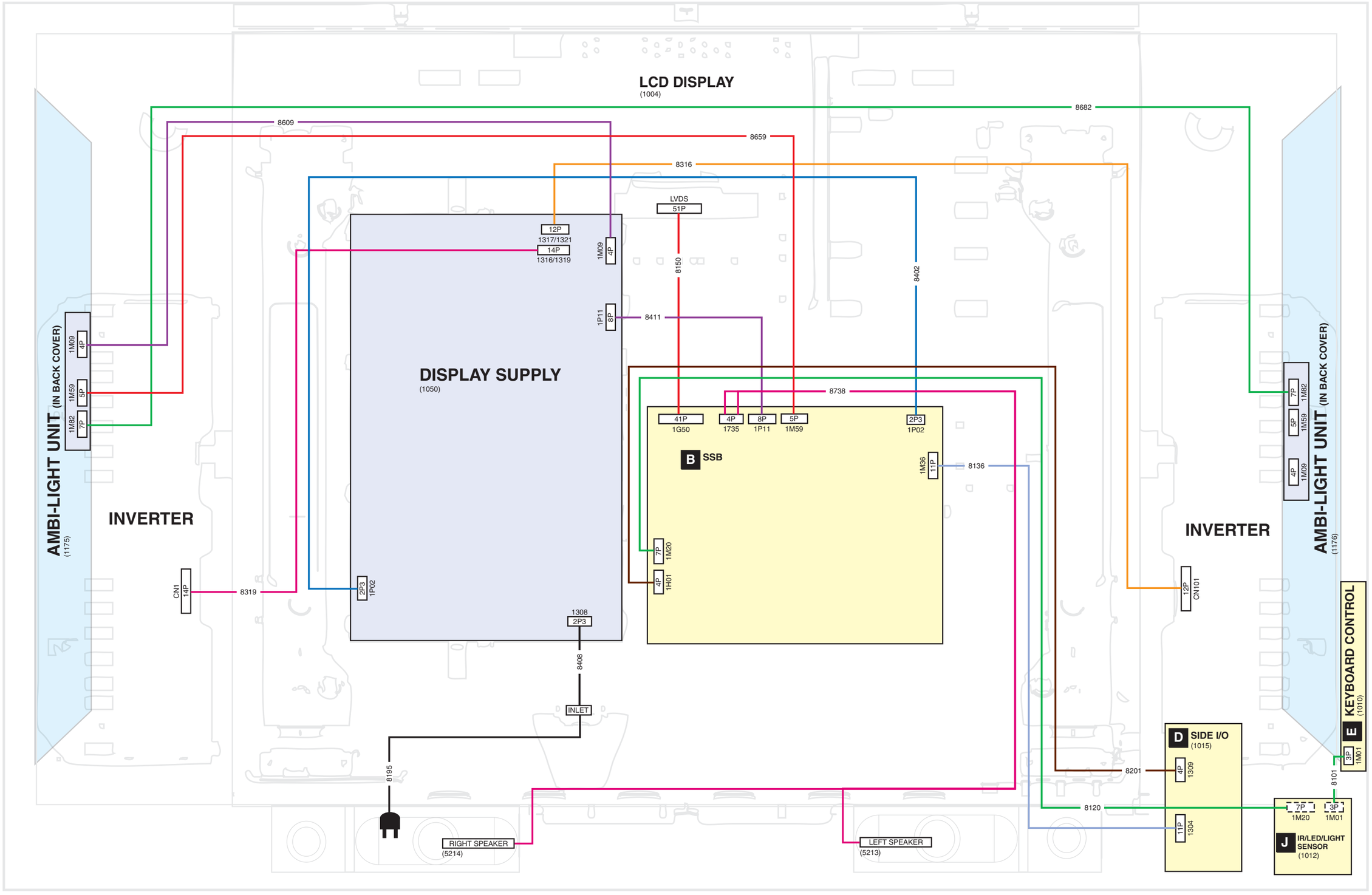
WIRING 47” LCD (STYLING ME7)



H_16770_067.eps
120707

Wiring Diagram 47” LCD + AmbiLight

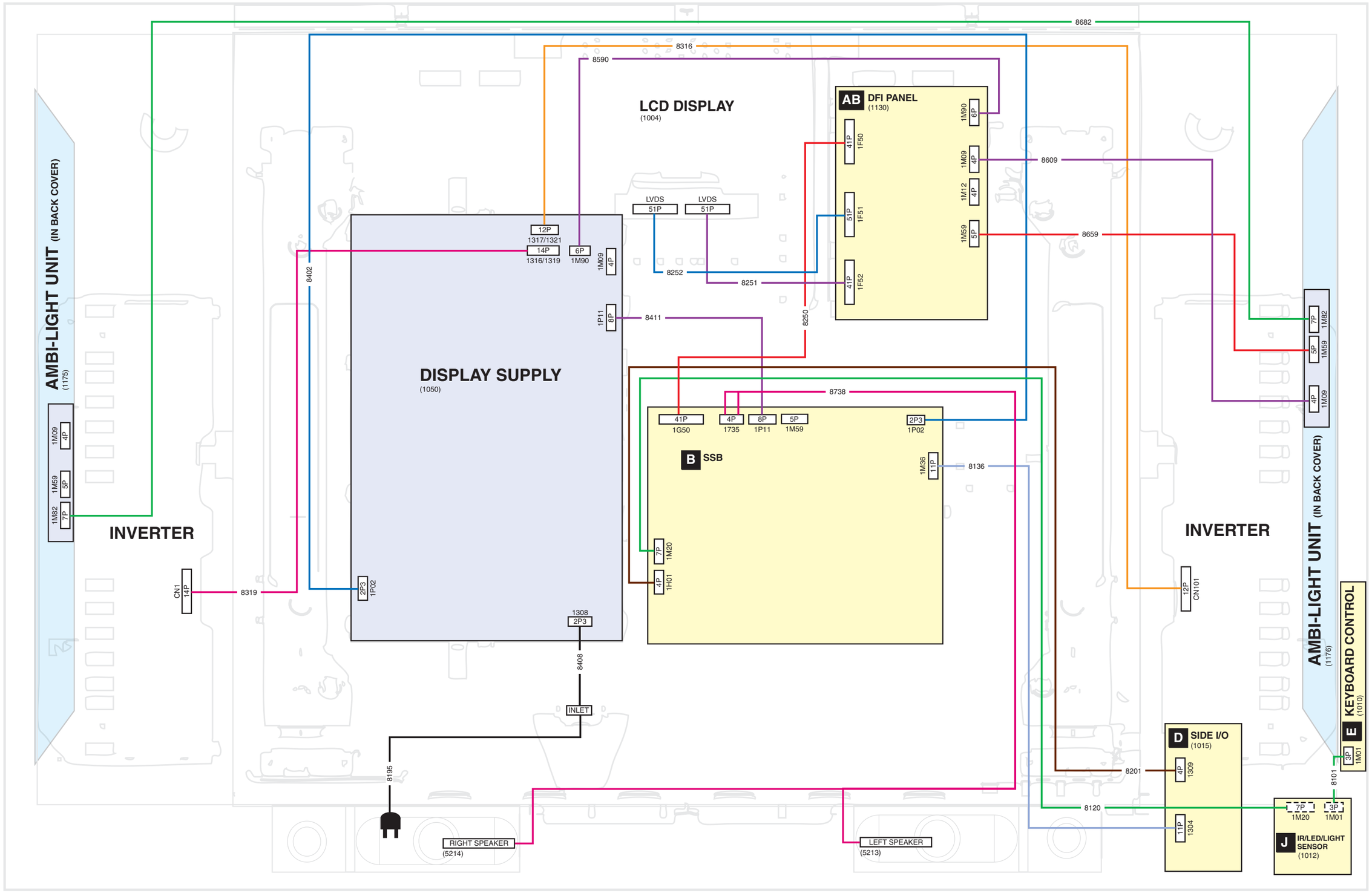
WIRING 47” LCD + AMBI LIGHT (STYLING ME7)



H_16770_068.eps
120707

Wiring Diagram 47” LCD + DFI + AmbiLight

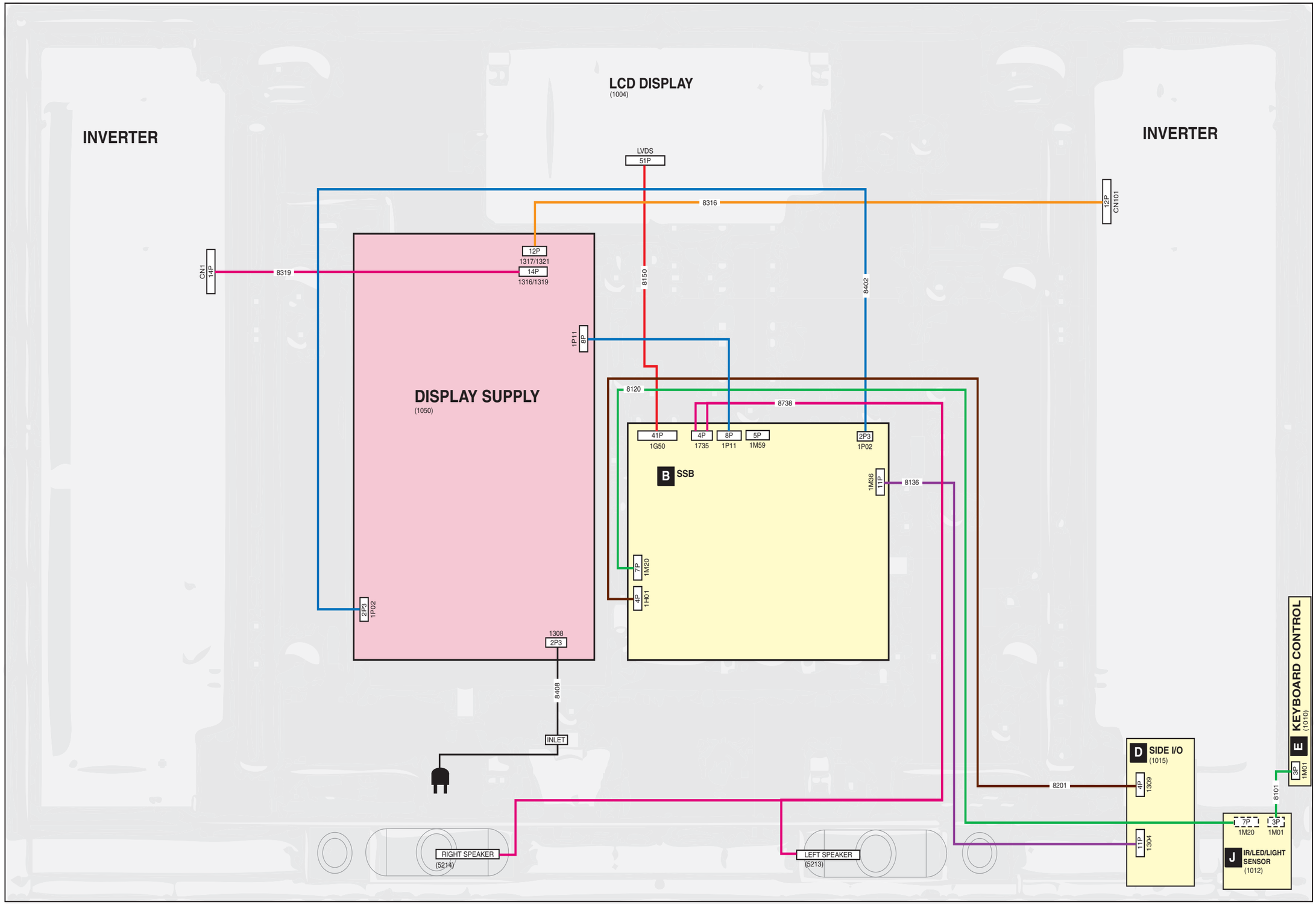
WIRING 47” LCD + DFI + AMBI LIGHT (STYLING ME7)



H_16771_009.eps
060907

Wiring Diagram 52” LCD

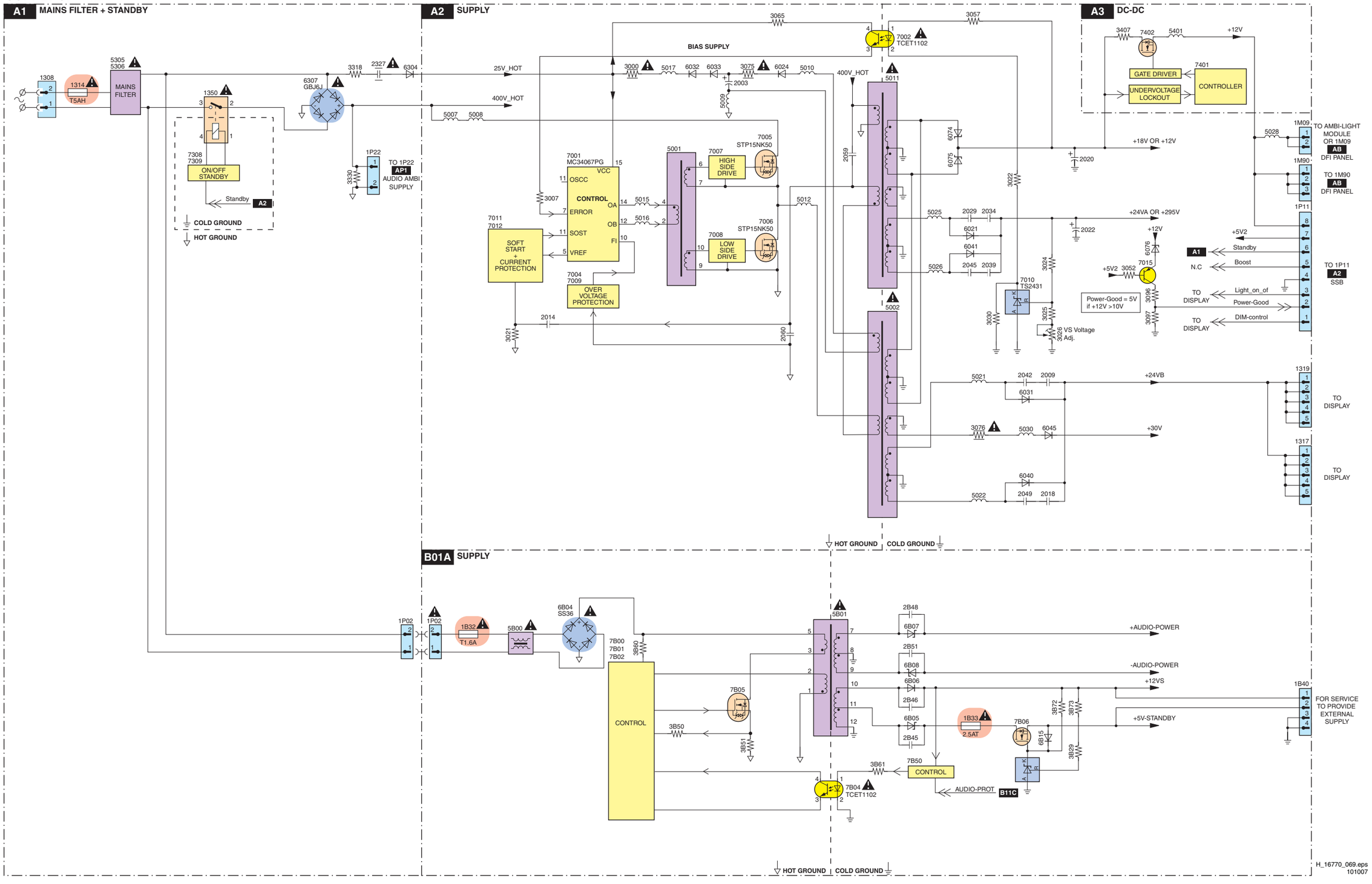
WIRING 52” LCD (STYLING ME7)



H_16771_004.eps
270907

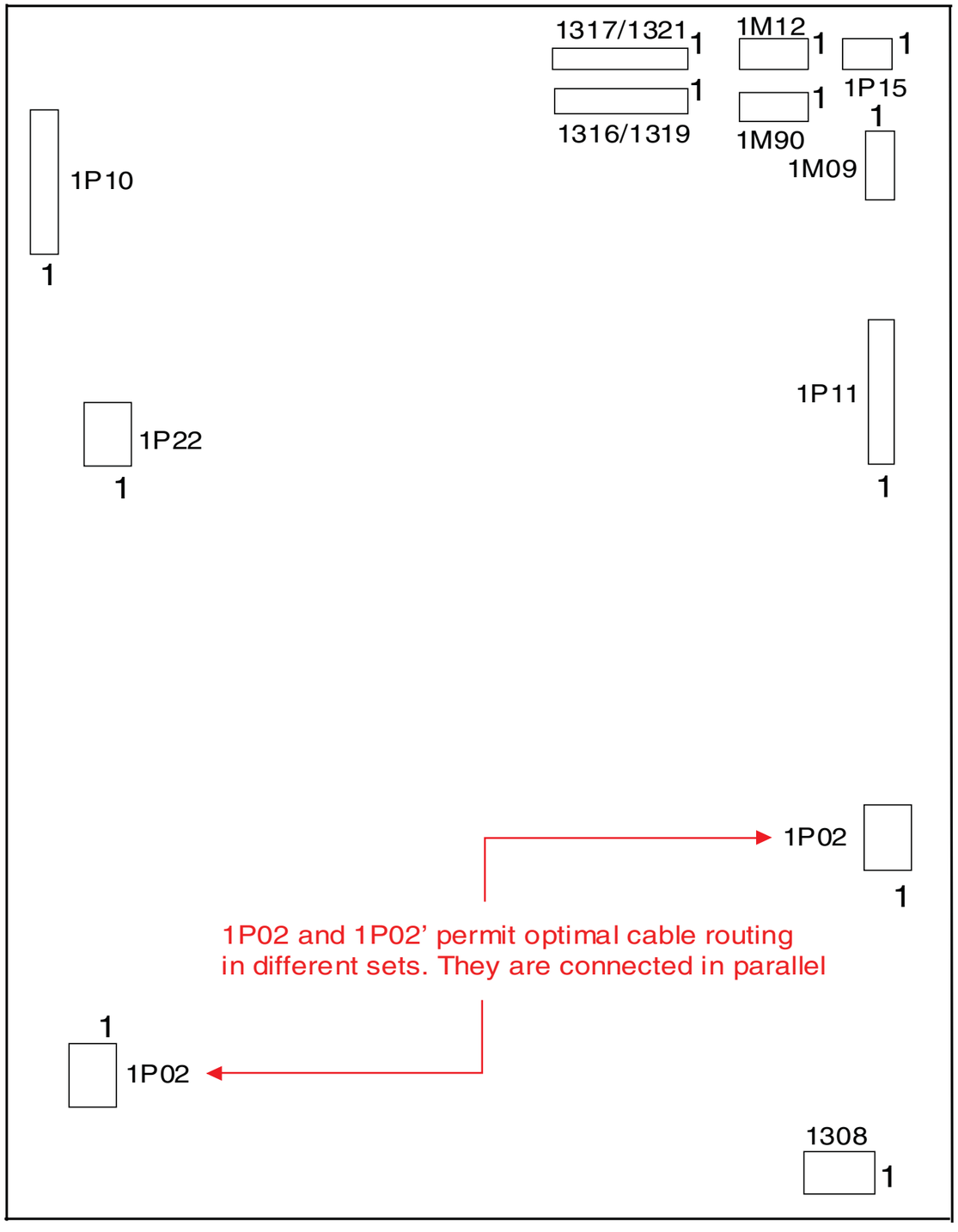
Block Diagram Supply 42”

SUPPLY 37”- 42"



Block Diagram Supply 47” Sanken

SUPPLY 47"- 52” SANKEN



1308 Mains connected.
1 VAC_Neutral
2 VAC_Live

1M09: Mains separated
1 +12Va
2 +12Va
3 Gnd
4 Gnd

1M12: Mains separated
1 +12Va
2 +12Va
3 Gnd
4 Gnd

1P15: Mains separated
1 +12Va
2 NC
3 Gnd

1M90 Mains separated
1 +12Va
2 +12Va
3 +12Va
4 Gnd
5 Gnd
6 Gnd

1P02 Mains connected
1 VAC_F_N
2 VAC_F_L

1P22 Mains connected
1 +400V
2 GNDHOT

1P11 Mains separated
1 DIM-control
2 Power Good
3 ON/OFF
4 Gnd
5 Boost (not used)
6 Standby
7 +5V2
8 +12Va

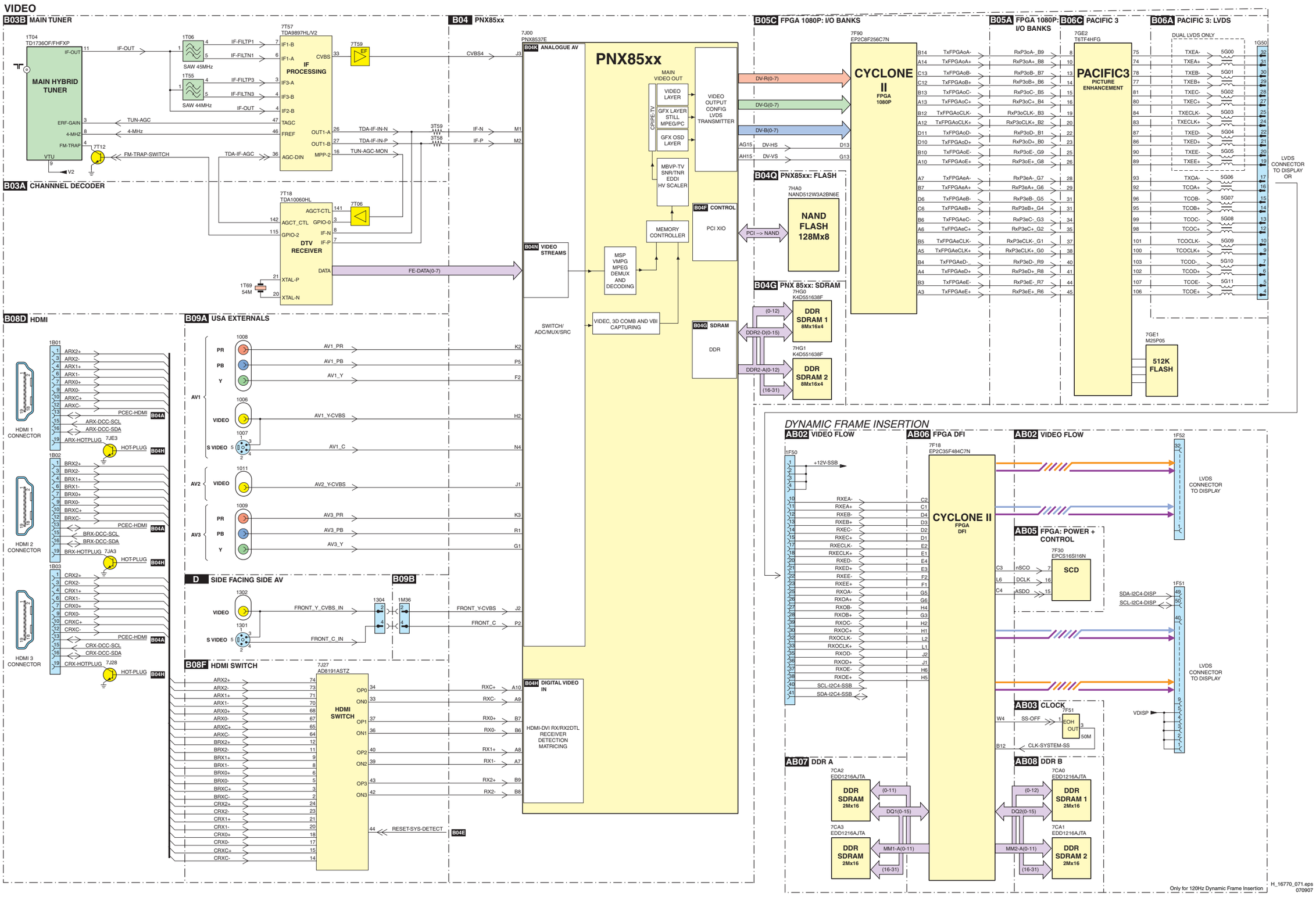
1P10 Mains separated
1 DIM-control
2 Power Good
3 ON/OFF
4 GND
5 Boost (not used)
6 nc.
7 Standby
8 nc.
9 +5V2
10 nc.

1316/1319 Mains separated
1 +24V
2 +24V
3 +24V
4 +24V
5 +24V
6 Gnd
7 Gnd
8 Gnd
9 Gnd
10 Gnd
11 Boost
12 ON/OFF
13 DIM-control
14 Gnd

1317/1321 Mains separated
1 +24V
2 +24V
3 +24V
4 +24V
5 +24V
6 Gnd
7 Gnd
8 Gnd
9 Gnd
10 Gnd
11 Boost
12 ON/OFF

H_16770_070.eps
230707

Block Diagram Video



Block Diagram Audio

AUDIO

B03B MAIN TUNER

1T04 TD1736F/FHFXP
MAIN HYBRID TUNER
IF-OUT
ERF-GAIN
4-MHZ
FM-TRAP
VTU
V2

1T06 SAW 45MHz
1T55 SAW 44MHz
IF-FILTP1
IF-FILTN1
IF-FILTP3
IF-FILTN3
IF-OUT

7T57 TDA9897HL/V2
IF PROCESSING
IF1-B
IF1-A
IF3-A
IF3-B
IF2-B
TAGC
FREF
AGC-DIN
CVBS
OUT1-A
OUT1-B
MPP-2

7T59 EF
TUN-AGC
4-MHz
FM-TRAP-SWITCH
TDA-IF-AGC
TDA-IF-IN-N
TDA-IF-IN-P
TUN-AGC-MON
3T59
3T58
IF-N
IF-P
CVBS4

B03A CHANNNEL DECODER

7T18 TDA10060HL
DTV RECEIVER
AGCT-CTL
AGCT_CTL
GPIO-0
GPIO-2
IF-N
IF-P
XTAL-P
XTAL-N
DATA
1T69 54M
7T06
FE-DATA(0-7)

B04 PNX85xx

7J00 PNX8537E
PNX85xx

B04K ANALOGUE AV
B04N VIDEO STREAMS
B04L AUDIO
B04L AUDIO
DAC
EPICS
ADC
DEMDEC
I²C Main
MEMORY CONTROL
Main Delayed
SPDIF DECODING, MULTICHANNEL, DOWNMIX AND SRC
SPDIF OUT DELAYED

B04F CONTROL
PCI XIO
PCI --> NAND

B04Q PNX85xx: FLASH
7HA0 NAND512W3A2BN6E
NAND FLASH 128Mx8

B04G PNX 85xx: SDRAM
B04G SDRAM
DDR
DDR2-D(0-15)
DDR2-A(0-12)
(0-12)
(16-31)
7HG0 K4D551638F
DDR SDRAM 1 8Mx16x4
7HG1 K4D551638F
DDR SDRAM 2 8Mx16x4

B08D HDMI

HDMI 1 CONNECTOR
1B01
ARX2+ ARX2- ARX1+ ARX1- ARX0+ ARX0- ARXC+ ARXC-
PCEC-HDMI
ARX-DCC-SCL
ARX-DCC-SDA
ARX-HOTPLUG
7JE3
HOT-PLUG
B04H

HDMI 2 CONNECTOR
1B02
BRX2+ BRX2- BRX1+ BRX1- BRX0+ BRX0- BRXC+ BRXC-
PCEC-HDMI
BRX-DCC-SCL
BRX-DCC-SDA
BRX-HOTPLUG
7JA3
HOT-PLUG
B04H

HDMI 3 CONNECTOR
1B03
CRX2+ CRX2- CRX1+ CRX1- CRX0+ CRX0- CRXC+ CRXC-
PCEC-HDMI
CRX-DCC-SCL
CRX-DCC-SDA
CRX-HOTPLUG
7JE28
HOT-PLUG
B04H

B09A USA EXTERNALS (BACK)

AV1 AUDIO IN L+R 1006 AUDIO-IN1-L AUDIO-IN1-R AJ6 AK6
AV2 AUDIO IN L+R 1011 AUDIO-IN2-L AUDIO-IN2-R AF5 AG5
AV3 AUDIO IN L+R 1060 1061 AUDIO-IN3-L AUDIO-IN3-R AH5 AJ5

B08C EXTERNALS (BOTTOM)

AUDIO OUT L+R 1C00 AUDIO-OUT-L AUDIO-OUT-R ADAC(5) ADAC(6) AJ10 AK9
7JA2 CONTROL A-PLOP B04M
AUDIO IN L+R 1C01 AUDIO-IN4-L AUDIO-IN4-R AK5 AH4
DIGITAL AUDIO 1C03 SPI SPI-OUT SPDIF-IN1 SPDIF-OUT AK15 AJ15

B04I AUDIO
7HM1
8 11 14 12

B08B SPDIF
7J30
1 4 12 11

D SIDE FACING SIDE AV
B09B
AUDIO IN L+R 1302 1304 1M36 L_FRONT_IN R_FRONT_IN AUDIO-IN5-L AUDIO-IN5-R AJ4 AK4

B08F HDMI SWITCH
7J27 AD8191ASTZ
HDMI SWITCH
ARX2+ ARX2- ARX1+ ARX1- ARX0+ ARX0- ARXC+ ARXC- BRX2+ BRX2- BRX1+ BRX1- BRX0+ BRX0- BRXC+ BRXC- CRX2+ CRX2- CRX1+ CRX1- CRX0+ CRX0- CRXC+ CRXC-
OP0 ON0 OP1 ON1 OP2 ON2 OP3 ON3
RXC+ RXC- RX0+ RX0- RX1+ RX1- RX2+ RX2-
A10 A9 B7 B6 A8 A7 B9 B8
RESET-SYS-DETECT B04E

B04H DIGITAL VIDEO IN
HDMI-DVI RX/RX2DTL RECEIVER DETECTION MATRICING

B04O DIGITAL VIDEO OUT / LVDS
B04A STANDBY CONTROLLER

B04I PNX 85xx: AUDIO
AJ13 AK12 ADAC(1) ADAC(2) 9HM1 9HM2

B11A AUDIO LEFT / RIGHT
+AUDIO-L -AUDIO-R FEEDBACK
7D00-2 7D00-3
CONTROL
+AUDIO-POWER -AUDIO-POWER
7D10-1 7D10-2
5D00 5D10 LEFT-SPEAKER
7D35-1 7D35-2
5DO7 5D11 RIGHT-SPEAKER
MUTE
1735 Speaker L Speaker R

B11C AUDIO: PROTECTION/MUTE CONTROL
DC-SENCE
7D00-1 7D00-4
7D70 CONTROL AUDIO-PROT B01A
MUTE
7D63÷7D64 CONTROL

B04A PNX85xx: STANDBY CONTROLLER
AH16 DV-B3_AUDIO-MUTE AUDIO-MUTE

B04B PNX85xx: DEBUG
V3 P0.7 9H27 AUDIO-RESET

B04M PNX 85xx: AUDIO
B08C A-PLOP AUDIO-RESET
7HVA 7HV1
A-PLOP-HDPH
7HV0 TPA4411RTJ
HEADPHONE DRIVER
AH11 AH10 ADAC(3) ADAC(4)
AUDIO-HDPH-L-AP AUDIO-HDPH-R-AP

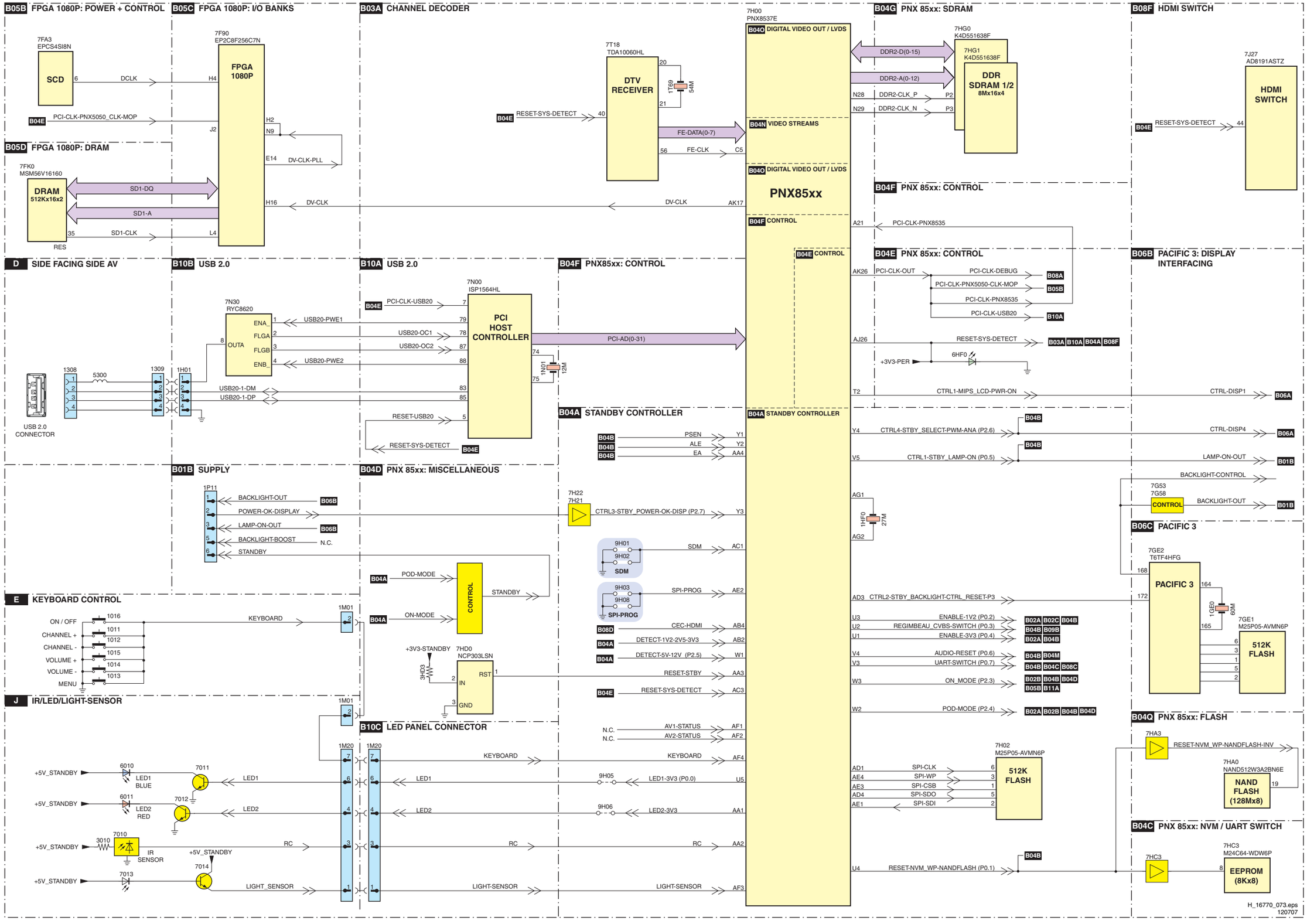
B09B ANALOGUE EXTERNALS
1M36 1304 1303
HEAD_PH_L HEAD_PH_R DETECT N.C.
Headphone Out 3.5mm

D SIDE FACING SIDE AV

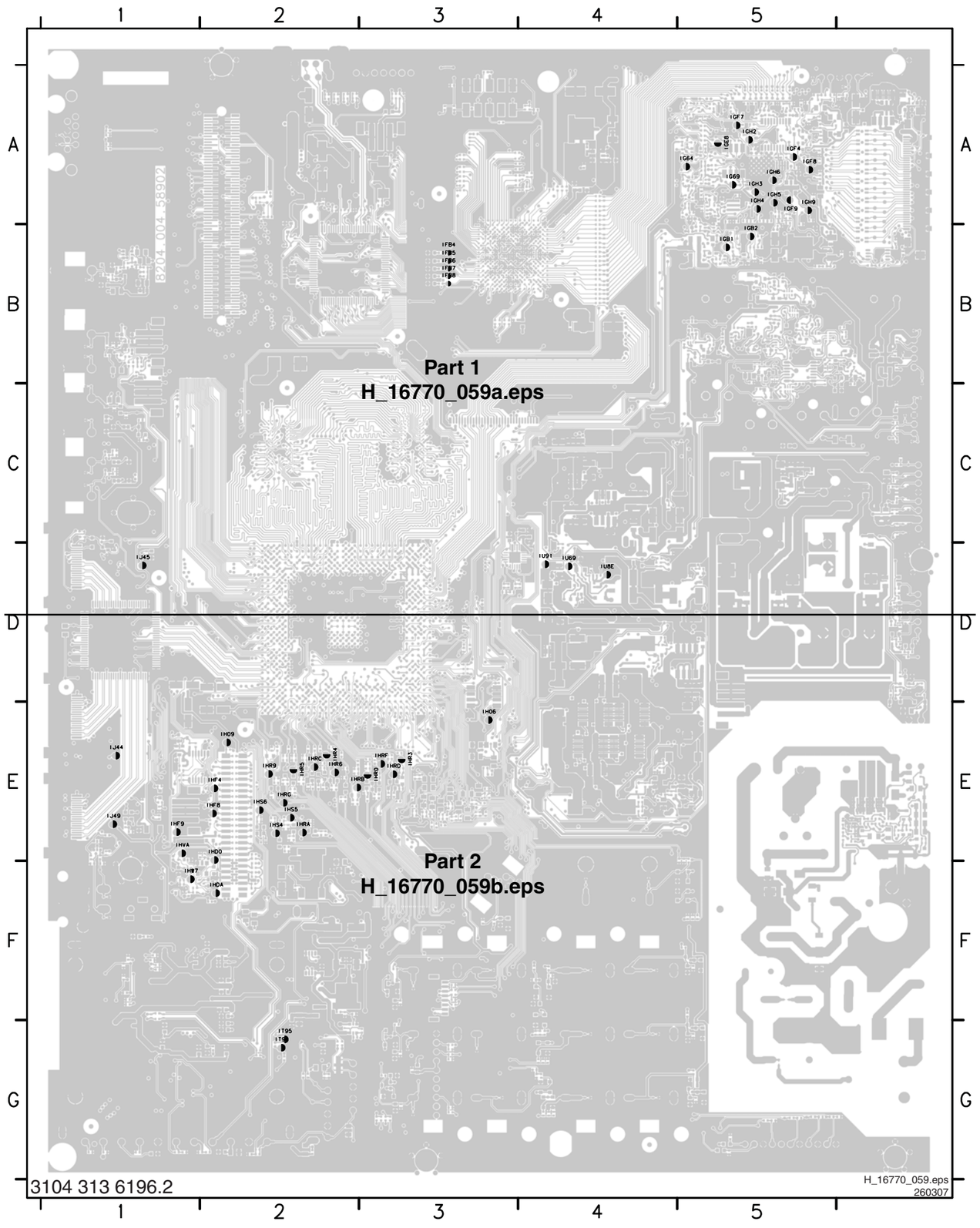
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Block Diagram Control & Clock Signals

CONTROL + CLOCK SIGNALS

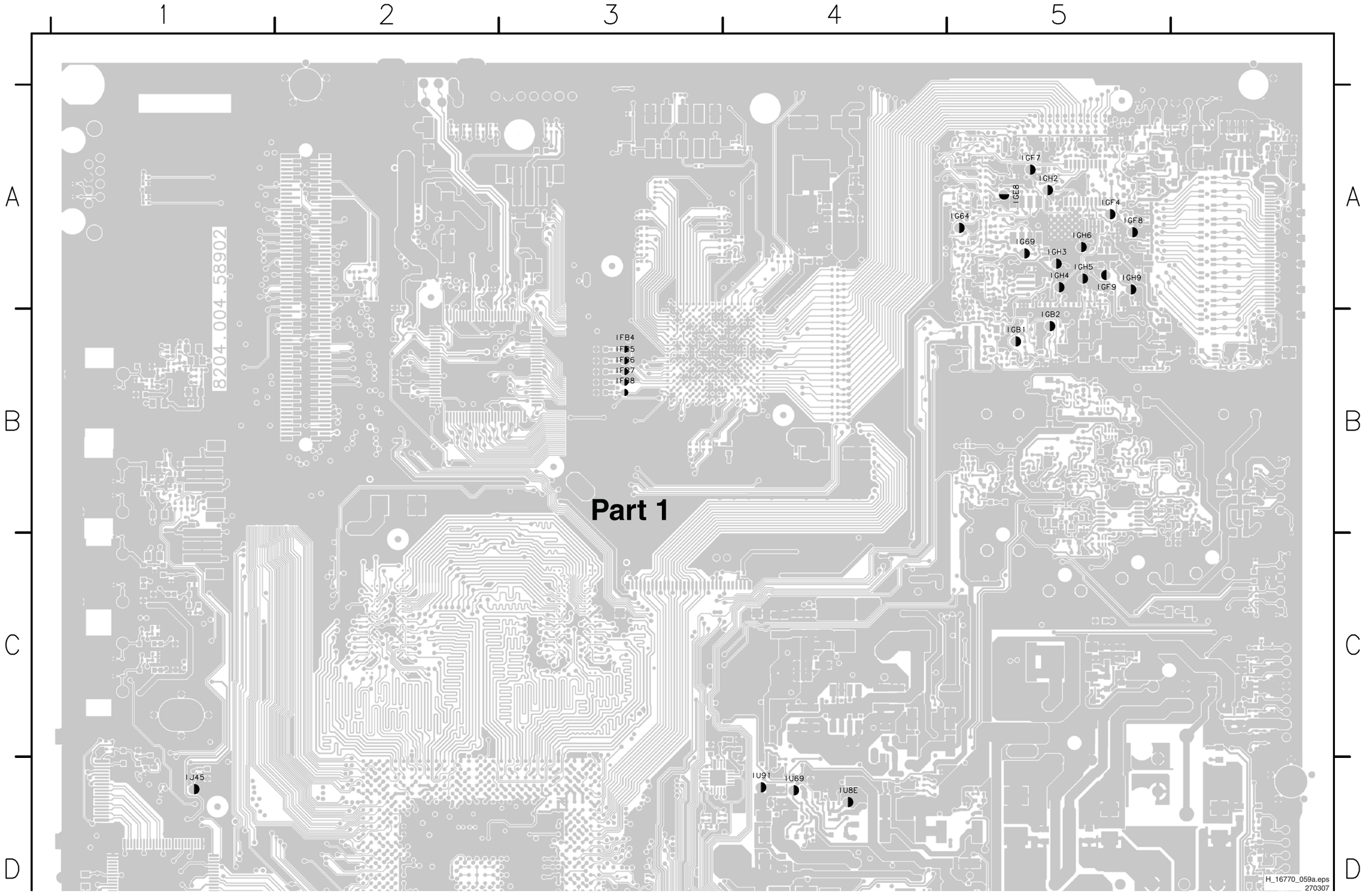


SSB: Test Points (Overview Top Side)

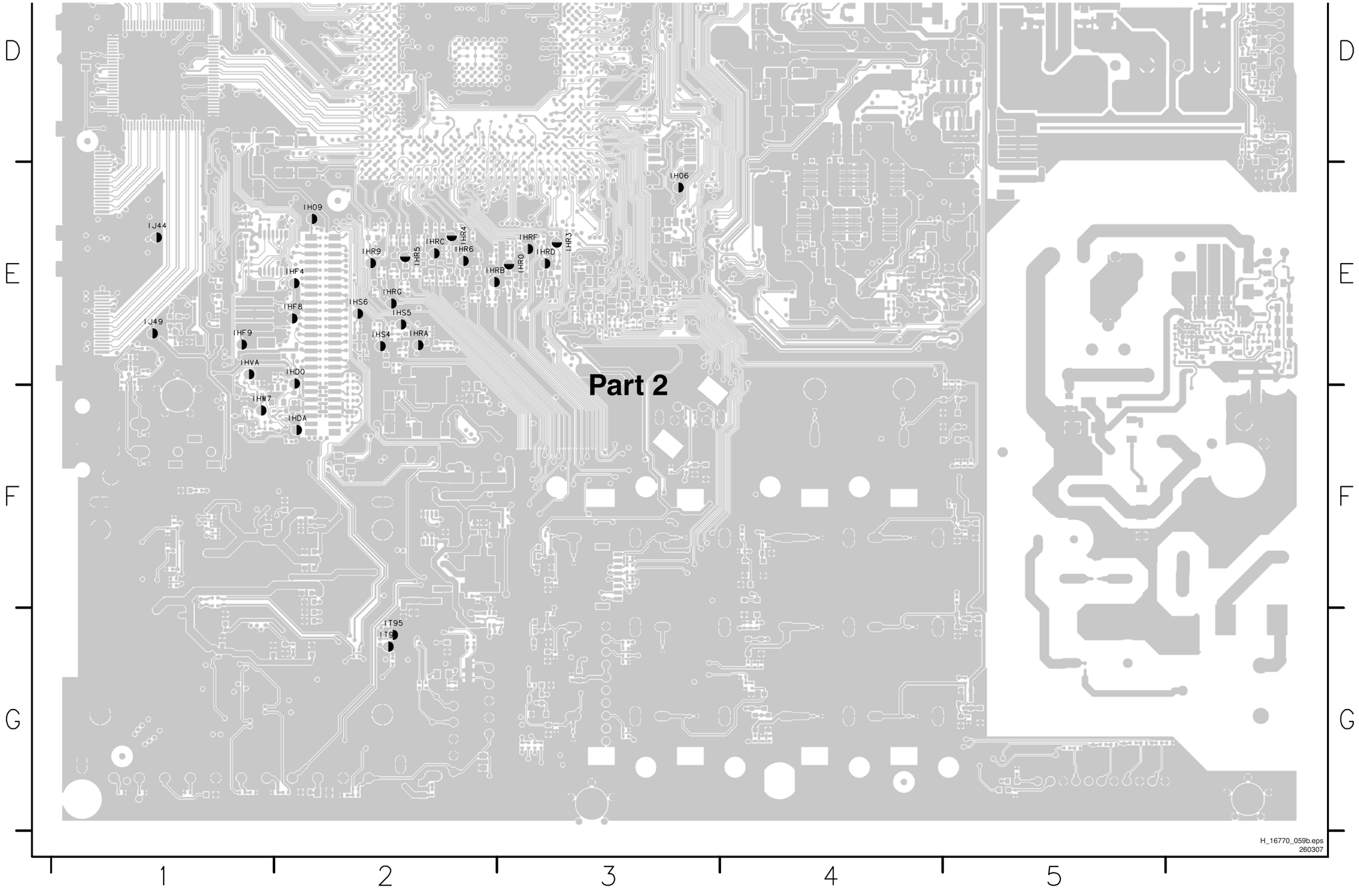


I705 D4
I706 D4
I707 E2
I708 E3
I709 E2
I710 E2
I711 E3
I712 E1
I713 F2
I714 E2
I715 A5
I716 A5
I717 A5
I718 B3
I719 B3
I720 B3
I721 B3
I722 B3
I723 E2
I724 E2
I725 E2
I726 A5
I727 A5
I728 A5
I729 A5
I730 A5
I731 A5
I732 G2
IFB4 B3
IFB5 B3
IFB6 B3
IFB7 B3
IFB8 B3
IG64 A5
IG64 A5
IG69 A5
IGB1 B5
IGB1 B5
IGB2 B5
IGB2 B5
IGE8 A5
IGE8 A5
IGF4 A5
IGF7 A5
IGF7 A5
IGF8 A5
IGF9 A5
IGH2 A5
IGH3 A5
IGH4 A5
IGH5 A5
IGH6 A5
IGH6 A5
IGH9 A5
IH06 E3
IH06 E3
IH09 E2
IH09 E2
IH09 E2
IHD0 E2
IHDA F2
IHF4 E2
IHF4 E2
IHF8 E2
IHF8 E2
IHF9 E1
IHR0 E3
IHR3 E3
IHR3 E3
IHR4 E2
IHR4 E2
IHR5 E2
IHR5 E2
IHR6 E2
IHR9 E2
IHR9 E2
IHRA E2
IHRB E2
IHRC E2
IHRD E3
IHRF E3
IHRF E3
IHRG E2
IHS4 E2
IHS4 E2
IHS5 E2
IHS6 E2
IHS6 E2
IHVA E1
IHVA E1
IHW7 F1
IHW7 F1
IJ44 E1
IJ44 E1
IJ45 D1
IJ45 D1
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IU91 D4

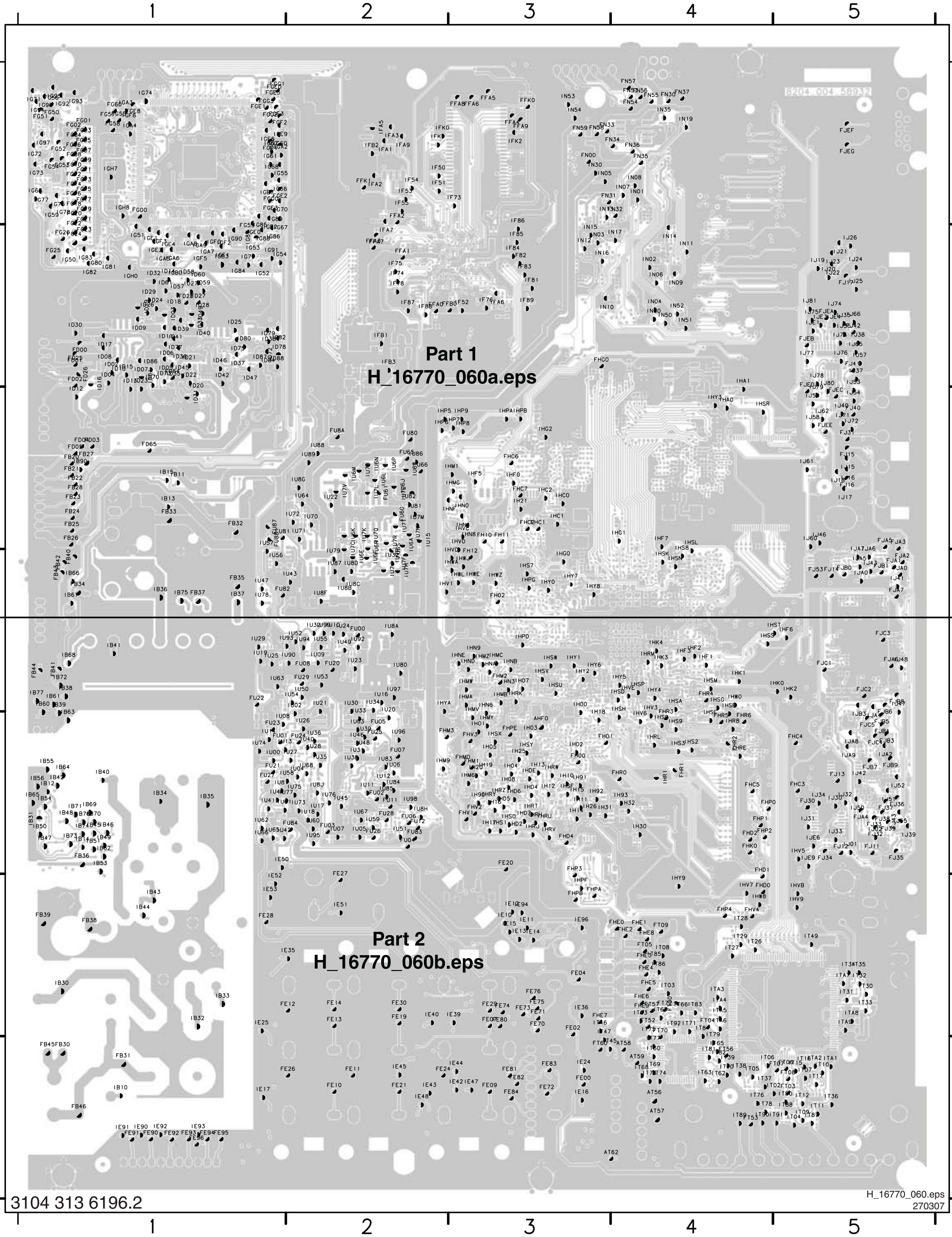
SSB: Test Points (Part 1 Top Side)



SSB: Test Points (Part 2 Top Side)

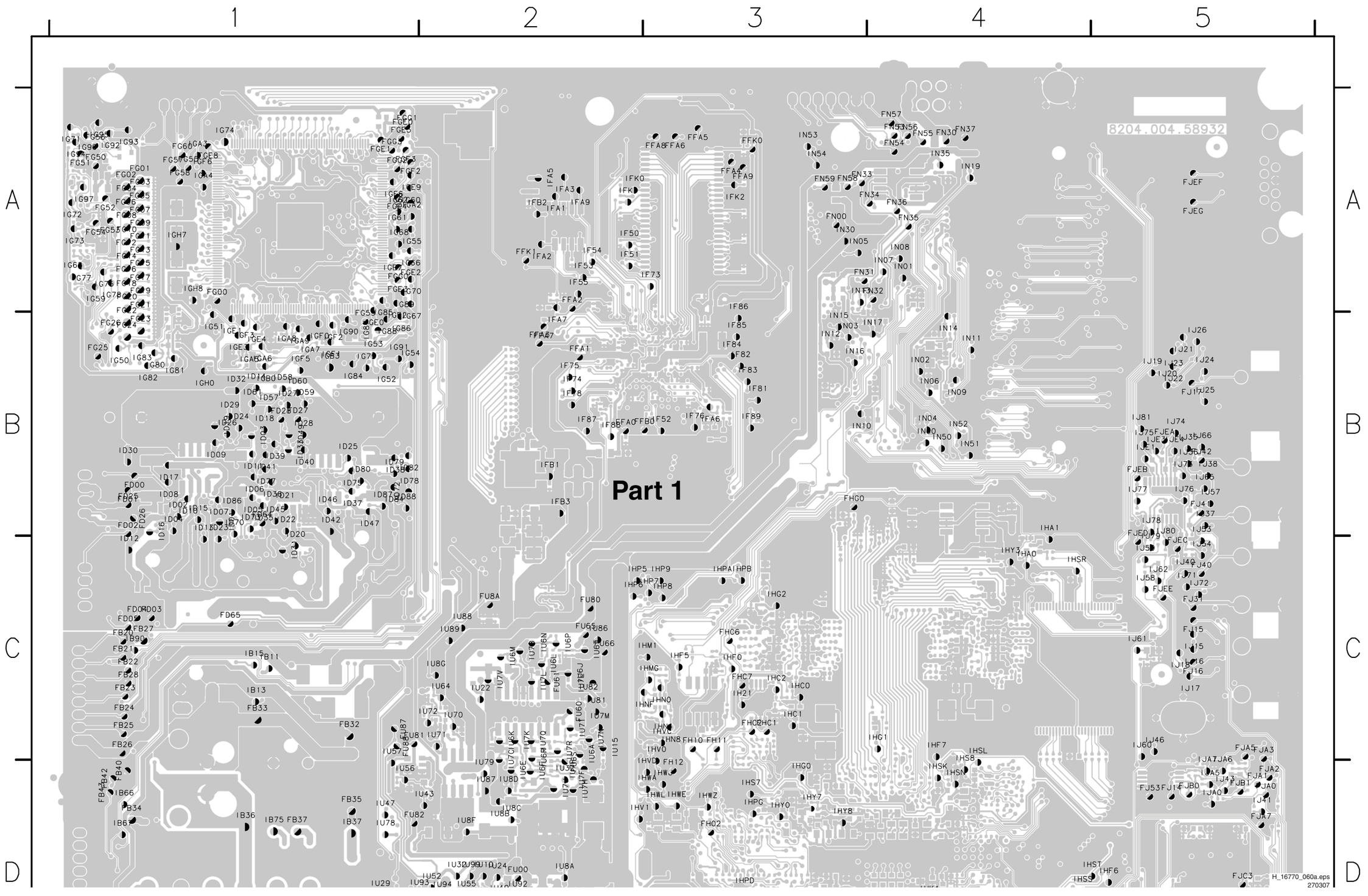


SSB: Test Points (Overview Bottom Side)

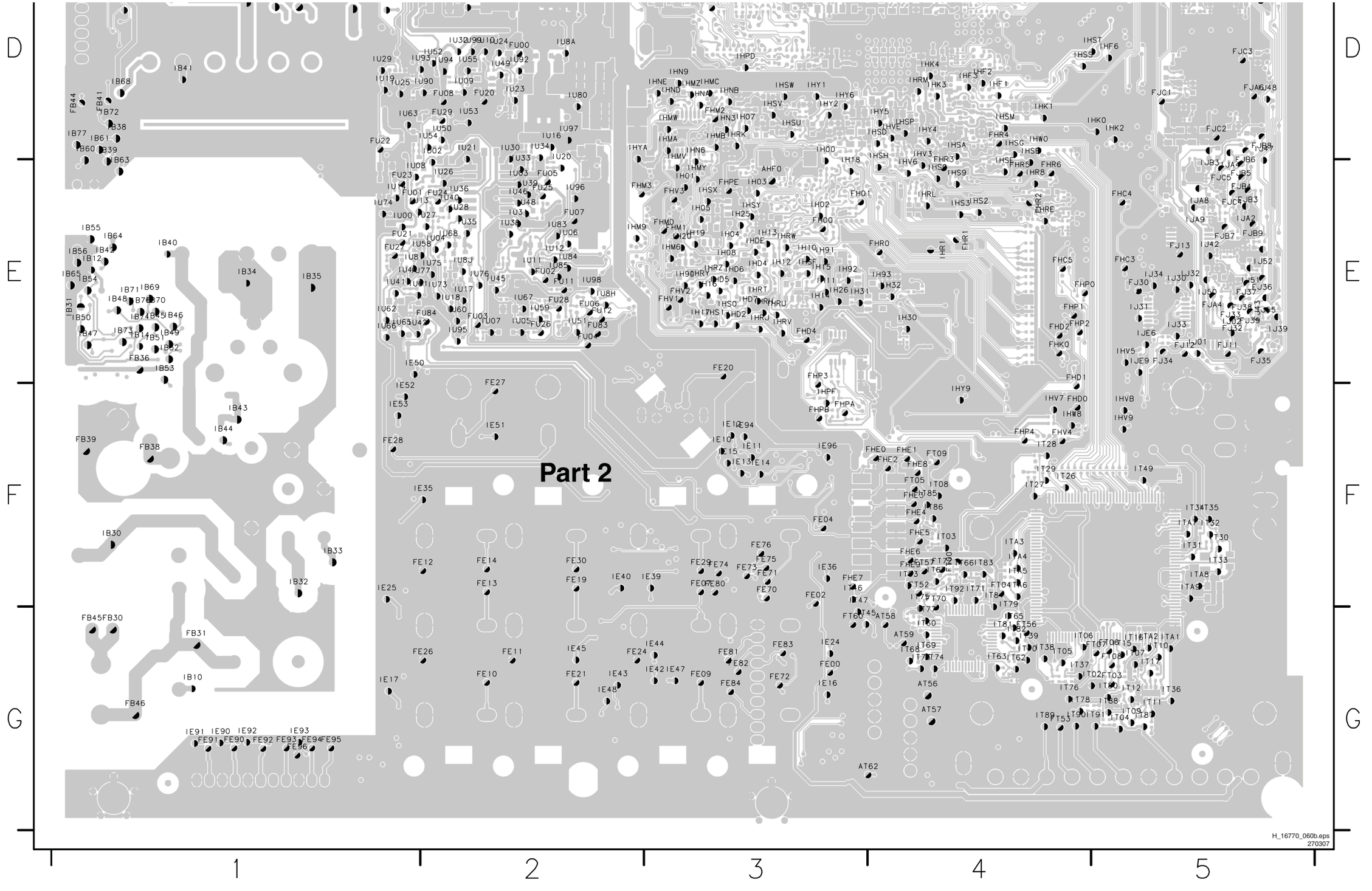


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A2	G4	I21	B3	F139	C5	F263	D1	FFA2	A2	FJ33	E5	I118	E2	I242	G4	I366	D4	I490	E3	I614	B1	IB60	D1	IF83	B3	IHD4	E3	IJ02	E5	IT45	G3	IU72	C2
A3	G4	I22	B3	F140	E5	F264	D1	FFA3	B2	FJ34	E5	I119	C2	I243	G4	I367	C4	I491	E3	I615	B1	IB61	D1	IF84	B3	IHD5	E3	IJ15	C5	IT46	F3	IU73	E2
A4	G4	I23	B2	F141	C5	F265	D1	FFA4	A3	FJ35	E5	I120	C2	I244	G5	I368	D3	I492	E3	I616	B1	IB63	E1	IF85	B3	IHD6	E3	IJ16	C5	IT47	F3	IU74	E1
A5	G4	I24	B3	F142	D5	F266	C1	FFA5	A3	FJ36	E5	I121	D2	I245	G4	I369	D3	I493	A1	I617	B1	IB64	E1	IF86	A3	IHD7	E3	IJ17	C5	IT49	F5	IU75	E2
A6	G4	I25	B2	F143	D5	F267	C1	FFA6	A3	FJ37	E5	I122	D2	I246	G4	I370	D3	I494	A1	I618	B1	IB65	E1	IF87	B2	IHDE	E3	IJ18	C5	IT60	G4	IU76	E2
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F2	A3	I27	A3	F145	D5	F269	C1	FFA8	A3	FJ39	E5	I124	E1	I248	G4	I372	D3	I496	A1	I620	B1	IB67	D1	IF89	B3	IHF1	D4	IJ20	B5	IT63	G4	IU78	D1
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I2	A2	I36	B5	F154	E5	F278	D1	FG04	A1	FJA3	C5	I133	E3	I257	G4	I381	F5	I505	B1	I629	C1	IB76	E1	IFB2	A2	IHK0	D5	IJ32	E5	IT75	F4	IU7L	C2
I3	A2	I37	B5	F155	D5	F279	E1	FG05	A1	FJA4	E5	I134	E4	I258	G4	I382	F5	I506	B1	I630	B1	IB77	D1	IFB3	B2	IHK1	D4	IJ33	E5	IT76	G4	IU7M	C2
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F38	F2	I72	C2	F190	F4	FB25	C1	FGE2	A1	FN54	A4	I169	E1	I293	G5	I417	E3	I541	A1	I665	D1	ID35	B1	IG87	B1	IHPG	D3	IJ78	B5	IU09	D2		
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F41	E3	I75	C2	F193	F4	FB28	C1	FGE5	A1	FN57	A4	I172	E1	I296	B4	I420	E3	I544	A1	I668	E1	ID38	B1	IG90	B1	IHRE	E4	IJ81	B5	IU12	E2		
F42	E3	I76	D2	F194	E3	FB30	G1	FGE8	A1	FN58	A3	I173	E1	I297	B4	I421	E3	I545	A1	I669	E1	ID39	B1	IG91	B1	IHRH	E3	IJA0	D5	IU13	E1		
F43	A1	I77	D2	F195	E4	FB31	G1	FGF2	A1	FN59	A3	I174	E2	I298	B4	I422	E3	I546	A1	I670	D1	ID40	B1	IG92	A1	IHRJ	E3	IJA2	E5	IU14	E1		
F44	B5	I78	D2	F196	F4	FB32	C1	FGF3	A1	FT00	F4	I175	E2	I299	A4	I423	D4	I547	A1	I671	E1	ID41	B1	IG93	A1	IHRK	D3	IJA4	E5	IU15	C2		
F45	B5	I79	E1	F197	F4	FB33	C1	FGG0	A1	FT03	G5	I176	E2	I300	A3	I424	E4	I548	A1	I672	E1	ID42	B1	IG94	A1	IHRL	E4	IJA5	D5	IU16	D2		
F46	C5	I80	E2	F198	C3	FB34	D1	FGG1	A1	FT04	F4	I177	D1	I301	A4	I425	D3	I549	A1	I673	E1	ID45	B1	IG95	A1	IHRM	D4	IJA6	C5	IU17	E2		
F47	B5	I81	C2	F199	C3	FB35	D1	FGG2	A1	FT05	F4	I178	D1	I302	B4	I426	E3	I550	A1	I674	D1	ID46	B1	IG96	A1	IHRT	E3	IJA7	C5	IU18	E2		
F48	C5	I82	C2	F200	E4	FB36	E1	FGG3	A1	FT06	G5	I179	D2	I303	B3	I427	E3	I551	A1	I675	E1	ID47	B1	IG97	A1	IHRU	E3	IJA8	E5	IU19	D1		
F49	C5	I83	C2	F201	E5	FB37	D1	FH00	E3	FT07	G5	I180	D2	I304	B3	I428	E4	I552	A1	I676	E1	ID49	B1	IGA2	A1	IHRV	E3	IJA9	E5	IU20	D2		
F50	B1	I84	C2	F202	E5	FB38	F1	FH01	E3	FT08	G5	I181	D2	I305	B4	I429	E4	I553	A1	I677	E1	ID57	B1	IGA3	A1	IHRW	E3	IJB3	E5	IU21	D2		
F51	C5	I85	C2	F203	C3	FB39	F1	FH02	D3	FT09	F4	I182	D2	I306	A3	I430	E4	I554	A1	I678	D1	ID58	B1	IGA4	A1	IHRY	E3	IJE1	B5	IU22	C2		
F52	C2	I86	D2	F204	C3	FB40	D1	FH10	C3	FT52	F4	I183	E2	I307	B3	I431	D3	I555	B1	I679	E1	ID59	B1	IGA5	B1	IHRZ	E3	IJE3	B5	IU23	D2		
F53	C1	I87	C2	F205	D3	FB41	D1	FH11	C3	FT53	G4	I184	D2	I308	B4	I432	F3	I556	B1	I680	E1	ID60	B1	IGA6	B1	IHS0	E3	IJE4	B5	IU24	D2		
F54	C1	I88	C2	F206	C3	FB42	D1	FH12	D3	FT56	G4	I185	E2	I309	B3	I433	D3	I557	B1	I681	E1	ID61	B1	IGA7	B1	IHS1	E3	IJE6	E5	IU25	D1		
F55	E2	I89	C2	F207	C3	FB43	D1	FHC1	C3	FT57	F4	I186	D1	I310	B4	I434	C3	I558	B1	I682	E1	ID70	B1	IGA8	B1	IHS2	E4	IJE9	E5	IU26	E2		
F56	E2	I90	C2	F208	A1	FB44	D1	FHC2	C3	FT60	G3	I187	E2	I311	A4	I435	C3	I559	B1	I683	E1	ID72	B1	IGA9	B1	IHS3	E4	IN00	B4	IU27	E2		
F57	D1	I91	D2	F209	A1	FB45	G1	FHC3	E5	FT70	F4	I188	E2	I312	A4	I436	C3	I560	F3	I684	E1	ID73	B1	IGB0	B1	IHS7	D3	IN01	A4	IU28	E2		
F58	C1	I92	D2	F210	A1	FB46	G1	FHC4	E5	FT72	F4	I189	E1	I313	B4	I437	C3	I561	F3	I685	E1	ID75	B1	IGB3	B1	IHS8	C4	IN02	B4	IU29	D1		
F59	C2	I93	D2	F211	A1	FD00	B1	FHC5	E4	FU00	D2	I190	E1	I314	A3	I438	C3	I562	G1	I686	E1	ID77	B1	IGE0	B1	IHS9	E4	IN03	B3	IU30	D2		
F60	C2	I94	D2	F212	A1	FD01	B1	FHC6	C3	FU01	E1	I191	E2	I315	B4	I439	C2	I563	G1	I687	E1	ID78	B1	IGE1	B1	IHSA	D4	IN04	B4	IU31	E2		
F61	C2	I95	C2	F213	A1	FD02	B1	FHC7	C3	FU02	E2	I192	E2	I316	B3	I440	C2	I564	G1	I688	E1	ID79	B1	IGE2	B1	IHSB	D4	IN05	A3	IU32	D2		
F62	C2	I96	D2	F214	A1	FD03	C1	FHD0	F4	FU03	E2	I193	E2	I317	B4	I441	C3	I565	G1	I689	E1	ID80	B1	IGE3	B1	IHSC	E4	IN06	B4	IU33	D2		
F63	C2	I97	C2	F215	A1	FD04	C1	FHD1	E4	FU04	E2	I194	E2	I318	A4	I442	D3	I566	F1	I690	E1	ID82	B1	IGE4	B1	IHSD	D4	IN07	A4	IU34	D2		
F64	D2	I98	C2	F216	A1	FD05	C1	FHD2	E4	FU05	E2	I195	E2	I319	B4	I443	D3	I567	F1	I691	E1	ID84	B1	IGE6	A1	IHSE	E4	IN08	A4	IU35	E2		
F65	E2	I99	C2	F217	A1	FD25	B1	FHD4	E3	FU06	E2	I196	D2	I320	E5	I444	D3	I568	F2	I692	F1	ID86	B1	IGE7	A1	IHSF	E3	IN09	B4	IU36	E2		
F66	E1	AHF0	E3	F218	A1	FD26	B1	FHE0	F4	FU07	E2	I197	E2	I321	E5	I445	D3	I569	E1	I693	F1	ID87	B1	IGE9	A1	IHSG	D4	IN10	B3	IU37	D2		
F67	E2	AT56	G4	F219	A1	FD27	B1	FHE1	F4	FU08	D2	I198	D2	I322	B5	I446	D3	I570	G2	I694	E1	ID88	B1	IGF0	B1	IHSH	D4	IN11	B4	IU38	E2		
F68	E2	AT57	G4	F220	A1	FD28	B1	FHE2	F4	FU11	E2	I199	E2	I323	B5	I447	C3	I571	G3	I695	E1	IE10	F3	IGF1	B1	IHSK	D4	IN12	B3	IU39	E2		
F69	E2	AT58	G4	F221	A1	FD64	B1	FHE3	F4	FU12	E2	I200	D2	I324	B5	I448	E3	I572	G2	I696	D1	IE11	F3	IGF2	B1	IHSL	C4	IN13	A3	IU40	E2		
F70	E1	AT59	G4	F222	B1	FD65	C1	FHE4	F4	FU20	D2	I201	D1	I325	D5	I449	C3	I573	G3	I697	D1	IE12	F3	IGF3	B1	IHSM	D4	IN14	B4	IU41	E1		
F71	D1	AT62	G4	F223	A1	FE00	G3	FHE5	F4	FU21	E1	I202	E2	I326	E5	I450	D3	I574	G2	I698	D1	IE13	F3	IGF5	B1	IHSN	D4	IN15	B3	IU42	E1		
F72	E1	F100	A3	F224	A1	FE02	F3	FHE6	F4	FU22	D1	I203	E2	I327	E5	I451	C3	I575	G3	I699	E1	IE14	F3	IGF6	A1	IHSP	D4	IN16	B3	IU43	D2		
F73	D2	F101	A3	F225	A1	FE04	F3	FHE7	F3	FU23	E1	I204	E2	I328	D5	I452	D3	I576	F2	I700	F1	IE15	F3	IGH0	B1	IHSR	C4	IN17	B4	IU44	E1		
F74	E2	F102	A4	F226	A1	FE07	F3	FHE8	F4	FU24	E2	I205	D1	I329	D5	I453	E3	I577	F3	I701	F1	IE16	G3	IGH7	A1	IHSS	D4	IN19	A4	IU45	E2		
F75	E2	F103	A4	F227	A1	FE09	G3	FHE9	F4	FU25	E2	I206	D2	I330	D5	I454	D3	I578	F3	I702	E1	IE17	G1	IGH8	A1	IHST	D5	IN30	A3	IU46	E2		
F76	D2	F104	A4	F228	A1	FE10	G2	FHG0	B3	FU26	E2	I207	D2	I331	D5	I455	E3	I579	F2	I703	F1	IE24	G3	IH00	D3	IHSU	D3	IN35	A4	IU47	D1		
F77	E2	F105	A4	F229	A1	FE11	G2	FHK0	E4	FU27	E1	I208	D2	I332	E5	I456	C3	I580	F1	I704	B5	IE25	F1	IH01	E3	IHSV	D3	IN50	B4	IU48	E2		
F78	E2	F106	A4	F230	A1	FE12	F2	FHM0	E3	FU28	E2	I209	E2	I333	D5	I457	D3	I581	G3	IB10	G1	IE35	F2	IH02	E3	IHSW	D3	IN51	B4	IU49	D2		
F79	E2	F107	A4	F231	A1	FE13	F2	FHM1	E3	FU29	D2	I210	D1	I334	C5	I458	D3	I582	G1	IB11	C1	IE36	F3	IH03	E3	IHSX	E3	IN52	B4	IU50	D2		
F80	E2	F108	A4	F232	B1	FE14	F2	FHM2	D3	FU60	C2	I211	E2	I335	C5	I459	D3	I583	G3	IB12	E1	IE39	F3	IH04	E3	IHSY	E3	IN53	A3	IU51	E2		
F81	E2	F109	A4	F233	B1	FE19	F2	FHM3	E2	FU61	C2	I212	E2	I336	B5	I460	E2	I584	F3	IB13	C1	IE40	F2	IH05	E3	IHV0	C3	IN54	A3	IU52	D2		
F82	E2	F110	A4	F234	A1	FE20	E3	FHP0	E4	FU65	C2	I213	D2	I337	B5	I461	E3	I585	F3	IB14	E1	IE42	G3	IH07	D3	IHV1	D2	IT02	G5	IU53	D2		
F83	E1	F111	A3	F235	A2	FE21	G2	FHP1	E4	FU66	C2	I214	E1	I338	B5	I462	C3	I586	F3	IB15	C1	IE43	G2	IH08	E3	IHV3	D4	IT03	F4	IU54	D2		
F84	D2	F112	A4	F236	G1	FE24	G2	FHP2	E4	FU6S	D2	I215	E1	I339	E5	I463	D4	I587	F3	IB30	F1	IE44	G3	IH10	E3	IHV5	E5	IT04	G5	IU55	D2		
F85	F4	F113	A3	F237	G1	FE26	G2	FHP3	E3	FU80	C2	I216	E2	I340	C5	I464	D4	I588	F3	IB31	E1	IE45	G2	IH11	E3	IHV6	E4	IT05	G4	IU56	D1		
F86	G4	F114	A4	F238	G1	FE27	E2	FHP4	F4	FU81	C1	I217	E2	I341	C5	I465	D5	I589	F3	IB32	F1	IE47	G3	IH12	E3	IHV7	F4	IT06	G4	IU57	C1		
F87	G3	F115	A3	F239	G1	FE28	F1	FHPA	F3	FU82	D1	I218	D2	I342	E5	I466	D4	I590	B1	IB33	F1	IE48	G2	IH13	E3	IHV9	F5	IT07	G5	IU58	E2		
F88	F4	F116	A5	F240	G1	FE29	F3	FHPB	F3	FU83	E2	I219	D2	I343	E5	I467	D5	I591	B1	IB34	E1	IE50	E1	IH14	E3	IHVB	F5	IT08	F4	IU59	E2		
F89	G4	F117	A5	F241	G1	FE30	F2	FHPE	E3	FU84	E2	I220	E1	I344	E5	I468	C3	I592	B1	IB35	E1	IE51	F2	IH15	E3	IHVC	C3	IT09	G5	IU60	E2		
F90	G4	F118	C5	F242	F1	FE70	F3	FHR0	E4	FU87	C1	I221	E2	I345	D5	I469	C4	I593	B1	IB36	D1	IE52	F1	IH16	E3	IHVD	D3	IT10	G5	IU61	E1		
F91	F4	F119	C5	F243	F2	FE71	F3	FHR1	E4	FU88	C1	I222	F5	I346	E5	I470	D3	I594	B1	IB37	D1	IE53	F1	IH17	E3	IHVE	D4	IT11	G5	IU62	E1		
F92	F4	F120	C5	F244	G2	FE72	G3	FHR2	E4	FU8A	C2	I223	F5	I347	C5	I471	C4	I595	B1	IB38	D1	IE90	G1	IH18	E3	IHW0	D4	IT12	G5	IU63	D1		
F93	G5	F121	B5	F245	G2	FE73	F3	FHR3	D4	I100	D2	I224	F5	I348	D5	I472	D5	I596	B1	IB39	D1	IE91	G1	IH19	E3	IHW8	F4	IT15	G5	IU64	C2		
F94	G5	F122	B5	F246	G2	FE74	F3	FHR4	D4	I101	C2	I225	F4	I349	E5	I473	C3	I597	B1	IB40	E1	IE92	G1	IH20	E3	IHWA	D3	IT16	G5	IU65	E1		
F95	G5	F123	E5	F247	E3	FE75	F3	FHR5	E4	I102	C2	I226	F4	I350	D5	I474	D4	I598	B1	IB41	D1	IE93	G1	IH21	C3	IHWE	D3	IT17	G5	IU66	E1		
F96	F4	F124	E5	F248	F2	FE76	F3	FHR6	E4	I103	C2	I227	F4	I351	C5	I475	D4	I599	B1	IB42	E1	IE94	F3	IH25	E3	IHWJ	D3	IT26	F4	IU67	E2		
F97	F4	F125	D5	F249	C1	FE80	F3	FHV1	E3	I104	C2	I228	F4	I352	E5	I476	D4	I600	B1	IB43	F1	IE96	F3	IH26	E3	IHWL	D3	IT27	F4	IU68	E2		
F98	G5	F126	D5	F250	B1	FE81	G3	FHV2	E3	I105	C2	I229	G5	I353	E5	I477	C3	I601	B1	IB44	F1	IF50	A2	IH30	E4	IHWZ	D3	IT28	F4	IU6A	C2		
F99	F4	F127	D5	F251	B1	FE82	G3	FHV3	E3	I106	C2	I230	G5	I354	E5	I478	E3	I602	B1	IB45	E1	IF51	A2	IH31	E3	IHY0	D3	IT29	F4	IU6E	D2		
I10	A2	F128	E5	F252	B1	FE83	G3	FHV4	F4	I107	C2	I231	F4	I355	E5	I479	E3	I603	B1	IB46	E1	IF52	B3	IH32	E4	IHY1	D3	IT30	F5	IU6F	D2		
I11	A2	F129	D5	F253	B1	FE84	G3	FJ11	E5	I108	D2	I232	F4	I356	E5	I480	E3	I604	B1	IB47	E1	IF53	A2	IH90	E3	IHY2	D3	IT31	F5	IU6J	C2		
I12	A2	F130	E5	F254	B1	FE90	G1	FJ12	E5	I109	D2	I233	G5	I357	E5	I481	E3	I605	B1	IB48	E1	IF54	A2	IH91	E3	IHY3	C4	IT32	F5	IU6K	C2		
I13	A2	F131	D5	F255	C1	FE91	G1	FJ13	E5	I110	C2	I234	G4	I358	B5	I482	E3	I606	B1	IB49	E1	IF55	A2	IH92	E3	IHY4	D4	IT33	F5	IU6L	C2		
I14	B3	F132	E5	F256	C1	FE92	G1	FJ14	D5	I111	C2	I235	G4	I359	E5	I483	E3	I607	B1	IB50	E1	IF73	A3	IH93	E4	IHY5	D4	IT34	F5	IU6M	C2		
I15	B2	F133	E5	F257	C1	FE93	G1	FJ15	C5	I112	C2	I236	G5	I360	E5	I484	C3	I608	B1	IB51	E1	IF74	B2	IHA0	C4	IHY6	D3	IT35	F5	IU6N	C2		
I16	B2	F134	E5	F258	B1	FE94	G1	FJ16	C5	I113	C2	I237	G5	I361	D2	I485	C3	I609	B1	IB52	E1	IF75	B2	IHA1	B4	IHY7	D3	IT36	G5	IU6P	C2		
I17	B3	F135	D5	F259	B1	FE95	G1	FJ17	B5	I114	D2	I238	F4	I362	F4	I486	C3	I610	B1	IB53	E1	IF76	B3	IHC0	C3	IHY8	D3	IT37	G4	IU6R	C2		
I18	B3	F136	D5	F260	B1	FE96	G1	FJ30	E5	I115	C2	I239	F4	I363	D3	I487	C4	I611	B1	IB54	E1	IF78	B2	IHC1	C3	IHY9	F4	IT38	G4	IU6T	C2		
I19	B3	F137	D5	F261	D1	FFA0	B2	FJ31	C5	I116	E2	I240	G4	I364	D3	I488	C4	I612	B1	IB55	E1	IF81	B3	IHC2	C3	IHYA	D2	IT39	G4	IU70	C2		

SSB: Test Points (Part 1 Bottom Side)



SSB: Test Points (Part 2 Bottom Side)



I2C IC Overview

I²C

B04E PNX85xx: CONTROL

B06B PACIFIC 3: DISPLAY-INTERFACE

B06A PACIFIC 3: LVDS

B05C FPGA 1080P: I/O BANKS

B06C PACIFIC 3

B03A CHANNEL DECODER

B03B MAIN TUNER

B06B PACIFIC 3: DISPLAY-INTERFACING

B01B SUPPLY

B04H PNX85xx: DIGITAL VIDEO IN

B08F HDMI SWITCH

B08D HDMI

AB02 VIDEO-FLOW

AB09 DISPLAY INTERFACING

AB06 FPGA DFI

AB10 FPGA AMBILIGHT

AB09 DISPLAY INTERFACING

B04A PNX85xx: STANDBY CONTROLLER

B04C PNX85xx: NVM / UART SWITCH

B08C EXTERNALS

B08A UART

B04O PNX85xx: DIGITAL VIDEO OUT / LVDS

I2C3-SDA AJ27 SDA3 3HPJ SDA-SSB

I2C3-SCL AJ28 SCL3 3HPH SCL-SSB

+3V3-PER 3HPM 3HPK

7H00 PNX8537E PNX85xx

ERR 03 ERR 05 ERR 53

1HP0

3HPB 3HPA

7HP5 PCA9540BDP 2 CHANNEL I2C MULTIPLEXER ERR 11 ERR 24 ERR 12

+3V3-STANDBY 3HPY 3HPX

3HPS 3HPR SDA-SSB-MUX1 SCL-SSB-MUX1

9G53 SDA-I2C4-DISP 9G54 SCL-I2C4-DISP

3G52 3G53 1G50 LVDS COONECTOR TO DISPLAY OR

3HPQ 3HPT

3HPC 3HPZ 3HPU 3HPV SDA-SSB-MUX2 SCL-SSB-MUX2

9T85 SDA-MUX2-BUF 9T86 SCL-MUX2-BUF

9T51 9T52 3T77 3T53 1T04 TD1736F MAIN TUNER ERR 34

SDA-SSB SCL-SSB

3J29 3J09 7J27 AD8191ASTZ HDMI SWITCH ERR 23

B04H HDMI DDC-SDA E10 DDC-SDA 89

DDC-SCL C9 DDC-SCL 90

AIN-5V BIN-5V CIN-5V

85 PARX-DDC-SDA 86 PARX-DDC-SCL ARX-DDC-SDA ARX-DDC-SCL 1B01

93 PBRX-DDC-SDA 94 PBRX-DDC-SCL BRX-DDC-SDA BRX-DDC-SCL 1B02

98 PCRX-DDC-SDA 99 PCRX-DDC-SCL CRX-DDC-SDA CRX-DDC-SCL 1B03

3x HDMI CONNECTOR

7JA0 M24C02 EEPROM 7JA1 M24C02 EEPROM 7J29 M24C02 EEPROM

1F50 41 SDA-I2C4-SSB 40 SCL-I2C4-SSB

3F19 3F20

3F40 3F49 7F18 EP2C35F484C7N CYCLONE II (FPGA) ERR 65

3F9G 3FPH 7F65 XC3S250E 4FTG256C(XILI)R SPARTAN FPGA

SDA-I2C4 SCL-I2C4

Only for 120Hz Dynamic Frame Insertion

Only for 120Hz Dynamic Frame Insertion

Only for 120Hz Dynamic Frame Insertion With AMBI-LIGHT

Only for 120Hz Dynamic Frame Insertion With AMBI-LIGHT

3F93 E1 SDA-AMBI-3V3 3F94 E2 SCL-AMBI-3V3

+5V-ON 3GA3 3GA0 7G61-2 7G61-1 +3V3

SDA-AMBI SCL-AMBI 3B59 5B10 3B58 5B12 1M59 TO AMBI-LIGHT NODULE

B4 3F6J SDA-AMBI-3V3 A5 3F9E SCL-AMBI-3V3 7F09-2 7F09-1 +5V +3V3 3F37 3F38 3F45 3B44 1M59 TO AMBI-LIGHT MODULE

I2C2-SDA AK28 SDA2 3HPG SDA-2

I2C2-SCL AK29 SCL2 3HPF SCL-2

B04A DDC-SDA AH3 3H41 DDC-SCL AG4 3H38

+3V3-STANDBY 3H03 3H02

9HP8 9HP7 9HP6 9HP5

7H02 M25P05 512 FLASH STANDBY CONTROL

7HC3 M24C64 EEPROM (MAIN NVM)

U4 P0.1 RESET-NVM_WP-NANDFLASH 7HC4

V3 P0.7 UART-SWITCH

7HC0 74HC4066PW

RXD AB1 3H59 TXD AC5 3H61 RXD-UP TXD-UP

RXD E27 TXD D28 RXD-MIPS TXD-MIPS

SDA-UP-MIPS SCL-UP-MIPS

3HC3 3HC6 RXD TXD

7JE2 ST3232C RS232 INTERFACE R1-IN R2-OUT T2-IN T1-OUT R2-IN T2-OUT R1-OUT T1-IN

3JE3 RXD2 3JE2 TXD2 1HE2 UART2 FOR FACTORY USE ONLY

3JE5 3JE4 9J06 9J07 RXD-SERV TXD-SERV 3J11 3J12 1M15 UART SERVICE CONNECTOR

I2C1SDA AH27 SDA1 3HPE SDA-SLAVE

I2C1-SCL AK27 SCL1 3HPD SCL-SLAVE

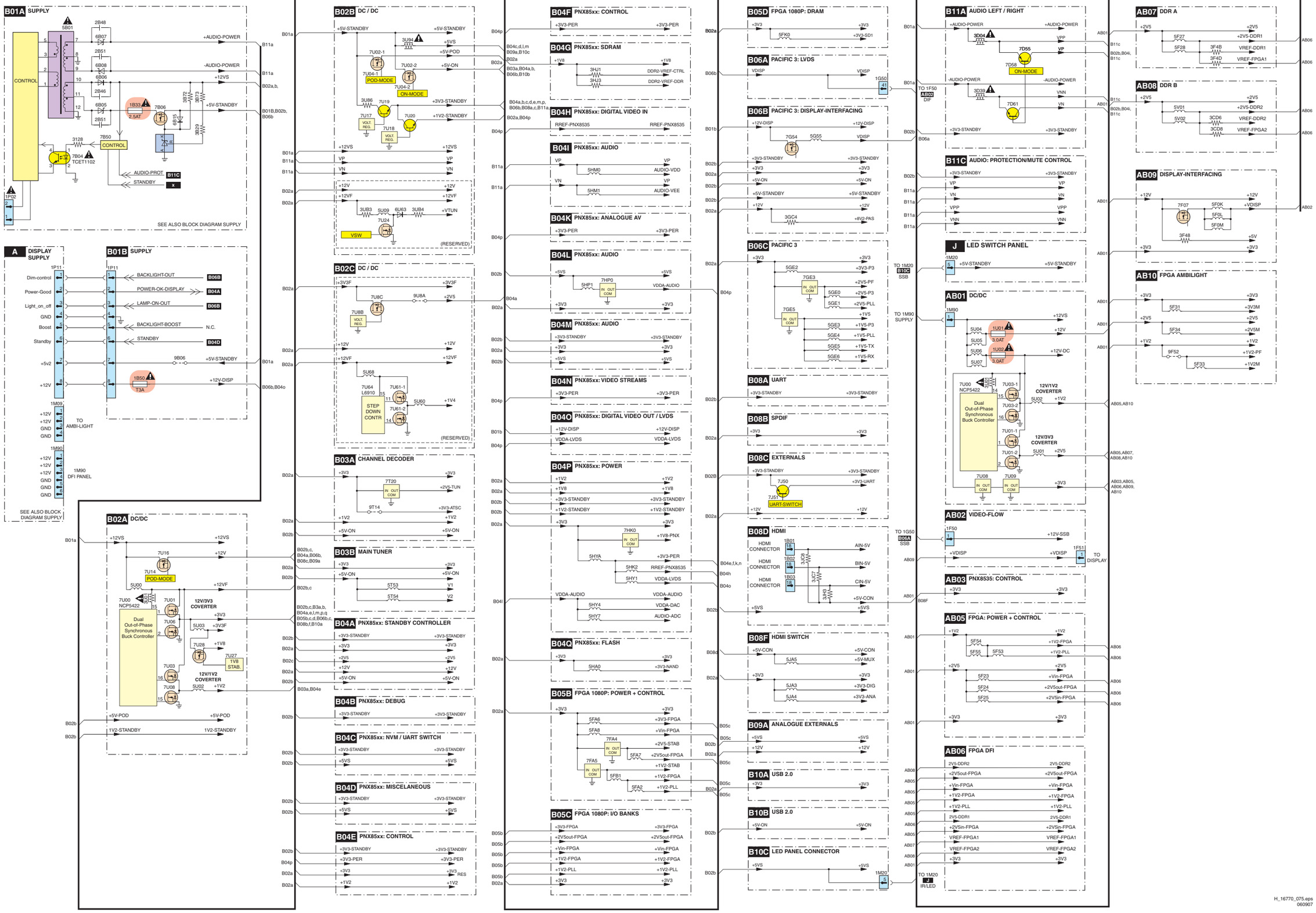
B04O VID_OUT TTL B0_UART AF15 9HWH DV-B0_UART2-RX B1_UART AK16 9HWG DV-B1_UART2-TX

UART LEVEL ADAPTER

H_16770_074.eps 070907

Supply Lines Overview

SUPPLY LINES OVERVIEW

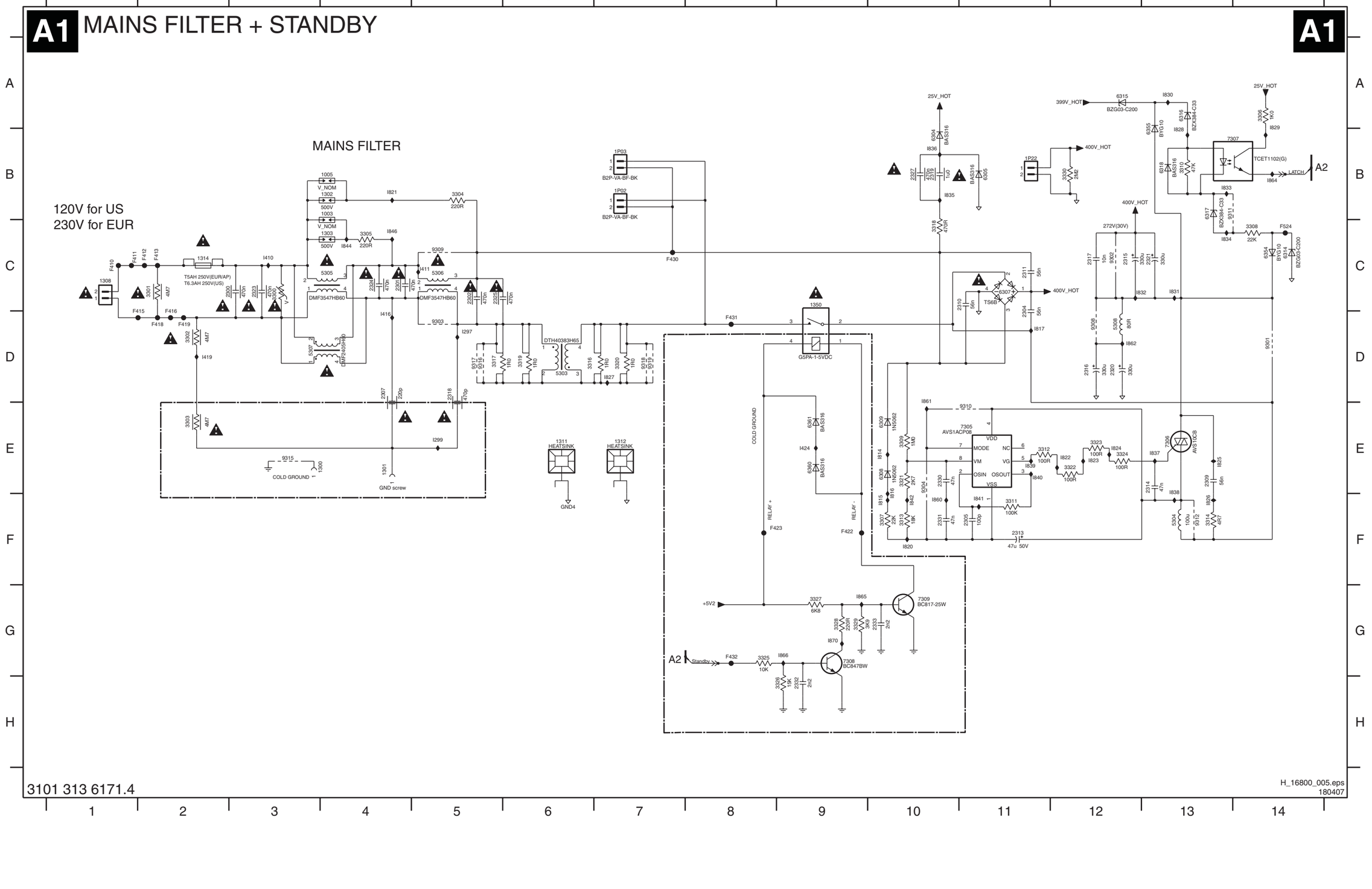


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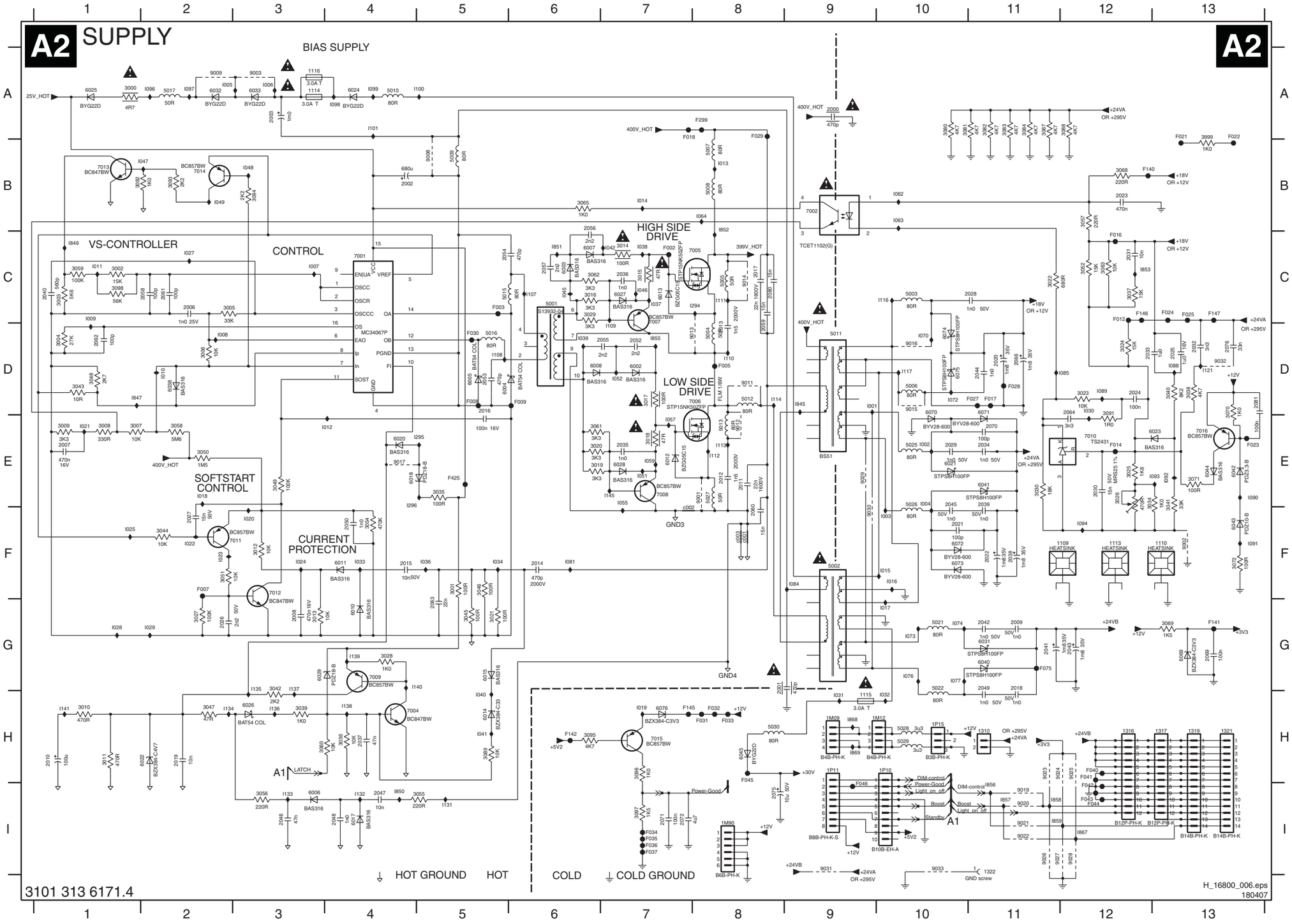
7. Circuit Diagrams and PWB Layouts

Display Supply (42"): Mains Filter & Standby

1003 B4 1303 C4 1350 C9 2301 C4 2309 E13 2315 C12 2320 D12 2327 B10 3300 C3 3305 C4 3310 B13 3316 D6 3321 E10 3326 H9 5303 D6 5308 D12 6309 E10 6318 B13 7305 E11 9301 D14 9309 C5 9316 D5 F411 C1 F418 D2 F431 D8 I410 C3 I814 E10 I821 B4 I826 F13 I831 C13 I836 B10 I841 F11 I861 D10 I870 G9
1005 B4 1308 C1 1P02 B7 2302 C5 2310 C11 2316 D12 2321 C13 2330 E10 3301 C2 3306 A14 3311 F11 3317 D5 3322 E12 3327 G9 5304 F13 6304 B10 6314 C14 6354 C14 7306 E13 9302 C12 9310 E11 9317 D5 F412 C2 F419 D2 F432 G8 I411 C5 I815 F10 I822 E12 I827 D7 I832 C12 I837 E13 I842 F10 I862 D12
1300 E3 1311 E6 1P03 B7 2304 D11 2311 C11 2317 C12 2323 C3 2331 F10 3302 D2 3303 E2 3307 F10 3312 E11 3318 C10 3323 E12 3328 G9 5305 C4 6305 B11 6315 A12 6355 B13 7307 B14 9303 D5 9311 B13 9318 D7 F413 C2 F422 F9 F524 C14 I416 D4 I816 E10 I823 E12 I828 B13 I833 B13 I838 E13 I844 C4 I864 B14
1301 E4 1312 E7 1P22 B11 2305 F11 2313 F11 2318 D5 2324 C4 2332 H9 3303 E2 3308 C14 3313 F10 3319 D6 3324 E12 3329 G9 5306 C5 6307 C11 6316 A13 6360 E9 7308 G9 9304 E10 9312 F13 9319 D7 F415 D2 F423 F8 I297 D5 I419 D2 I817 D11 I824 E12 I829 A14 I834 C13 I839 E11 I846 C4 I865 G9
1302 B4 1314 C2 2300 C3 2307 D4 2314 E13 2319 B10 2325 C5 2333 G10 3304 B5 3309 E10 3314 F13 3320 D7 3325 G8 3330 B12 5307 D3 6308 E10 6317 B13 6361 E9 7309 G10 9308 D12 9315 E3 F410 C1 F416 D2 F430 C7 I299 E5 I424 E9 I820 F10 I825 E13 I830 A13 I835 B10 I840 E11 I860 F10 I866 G9

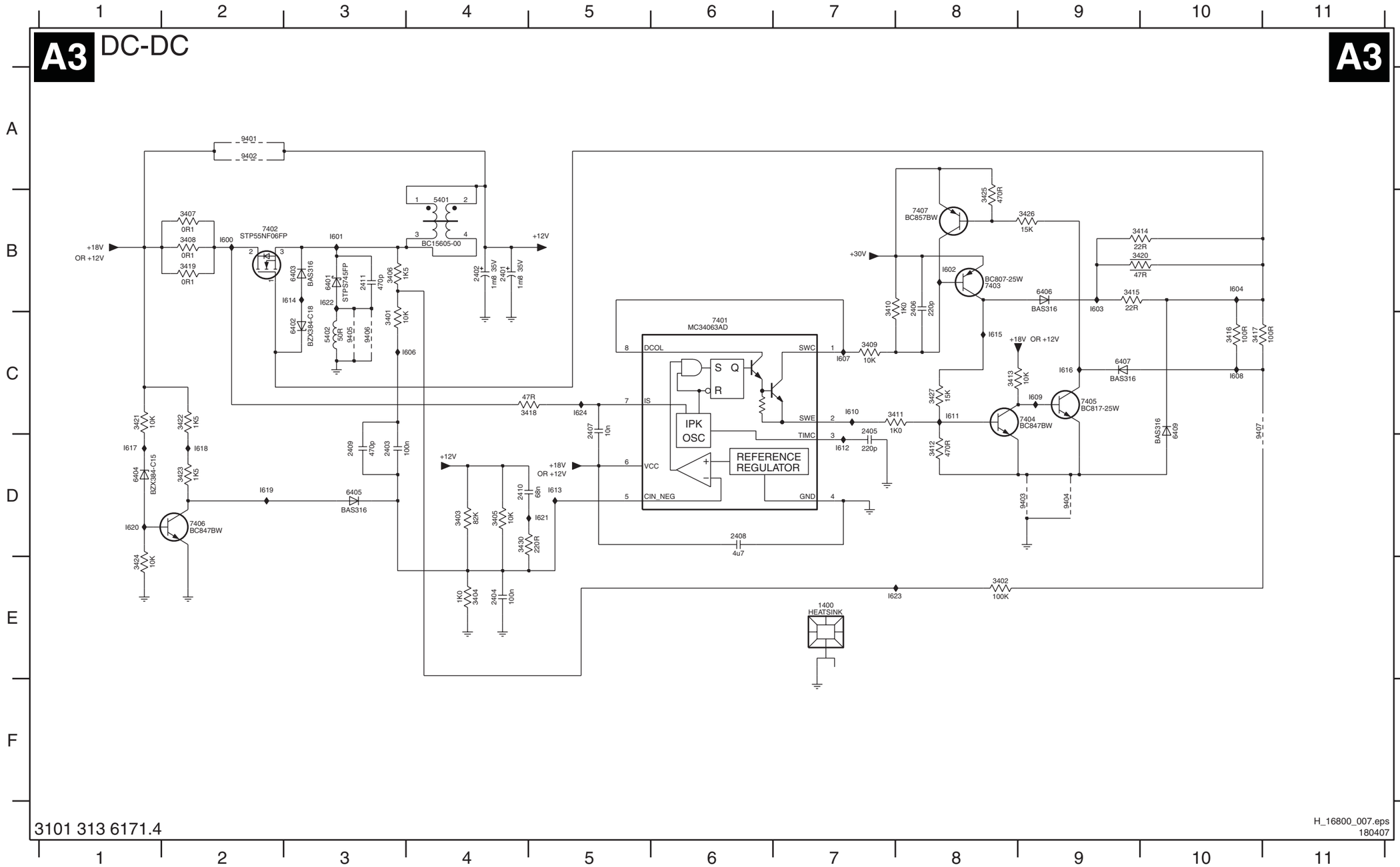


Display Supply (42”): Supply



1109 F12	3025 E12	6043 F13	I019 H7
1110 F13	3026 E12	6044 E13	I020 F3
1113 F12	3027 G2	6045 H8	I021 E1
1114 A3	3028 G4	6069 G13	I022 F2
1115 H9	3029 C6	6070 D10	I023 F2
1116 A3	3030 E11	6071 D11	I024 F3
1310 H11	3034 E12	6072 F10	I025 F1
1316 H12	3035 E5	6073 F10	I027 C2
1317 H13	3036 H4	6074 D10	I028 G1
1319 H13	3037 C12	6075 D10	I029 G2
1321 H13	3038 D13	6076 H7	I030 D12
1322 I11	3039 H3	7001 C4	I031 H9
1M09 H9	3040 D13	7002 B9	I032 H10
1M12 H10	3041 E13	7004 H4	I033 F4
1M90 I8	3042 G3	7005 C8	I034 F5
1P10 H10	3043 D1	7006 D8	I036 F5
1P11 H9	3044 F2	7007 C7	I037 C7
1P15 H10	3045 G5	7008 E7	I038 C7
2000 A9	3046 F5	7009 G4	I039 D6
2001 G8	3047 H2	7010 E12	I040 H5
2002 B4	3048 D1	7011 F2	I041 H5
2003 A3	3049 E3	7012 F3	I042 C7
2006 C2	3050 E2	7013 B1	I045 C6
2007 E1	3051 F2	7014 B2	I046 C7
2008 G3	3052 C12	7015 H7	I047 B2
2009 G11	3054 F4	7016 E13	I048 B3
2010 H1	3055 I5	9001 E8	I049 B2
2011 E8	3056 I3	9002 F13	I051 E7
2012 E8	3057 B12	9003 A3	I052 D7
2013 D8	3058 E2	9008 B5	I055 E7
2014 F6	3059 C1	9009 A2	I057 E7
2015 F4	3060 H3	9011 D8	I059 E7
2016 D5	3061 E6	9012 E8	I062 B10
2017 C8	3062 C6	9013 D8	I063 B10
2018 G11	3063 C12	9014 C8	I064 B8
2019 H2	3065 B6	9015 D10	I070 D10
2020 D11	3068 B12	9016 D10	I072 D10
2021 F10	3069 G13	9017 E4	I073 G10
2022 F11	3070 D13	9019 I11	I074 G10
2023 B12	3071 E13	9020 I11	I076 G10
2024 D12	3072 F13	9021 I11	I077 G10
2025 D13	3080 A10	9022 I11	I081 F6
2026 G2	3081 A10	9023 H11	I084 F9
2027 F2	3082 A11	9024 H11	I085 D12
2028 C11	3083 A11	9025 H12	I088 D13
2029 E10	3084 A11	9026 I11	I089 D12
2030 E12	3087 A11	9027 I11	I090 E13
2031 C12	3088 A12	9028 I12	I091 F13
2032 D13	3089 H5	9029 E9	I092 E13
2033 D12	3091 D12	9030 F9	I093 E13
2034 E11	3092 B1	9031 I9	I094 F12
2035 E7	3093 B2	9032 D13	I096 A2
2036 C7	3094 B3	9033 I10	I097 A2
2037 H4	3095 H6	F002 C7	I098 A4
2038 F11	3096 H7	F003 C5	I099 A4
2039 E11	3097 I7	F005 D8	I100 A5
2040 C1	3098 C1	F007 F2	I101 A4
2041 G11	3999 A13	F008 D5	I107 C6
2042 G11	5001 C6	F009 D6	I108 D5
2043 G12	5002 F9	F012 C12	I109 D7
2044 D11	5003 C10	F014 E12	I110 D8
2045 E10	5004 D8	F016 C12	I111 C8
2046 I3	5005 C8	F017 D11	I112 E8
2047 I4	5006 D10	F018 A7	I113 E8
2048 I4	5007 B8	F021 A13	I114 D8
2049 G11	5008 B8	F022 A13	I116 C10
2050 F4	5009 B5	F023 E13	I117 D10
2052 D7	5010 A4	F024 C13	I121 D13
2053 D5	5011 D9	F025 C13	I131 I5
2054 C5	5012 D8	F027 D11	I132 I4
2055 D7	5013 E8	F028 D11	I133 I3
2056 B6	5015 C5	F029 A8	I134 H2
2057 C6	5016 D5	F030 D5	I135 G3
2058 C2	5017 A2	F031 H8	I136 H3
2059 D8	5021 G10	F032 H8	I137 G3
2060 F8	5022 G10	F033 H8	I138 H4
2061 C2	5025 E10	F034 I7	I139 G4
2062 D1	5026 E10	F035 I7	I140 G5
2063 G5	5027 E8	F036 I7	I141 H1
2064 D12	5028 H10	F037 I7	I145 E7
2066 D11	5029 H10	F040 H12	I294 C8
2069 G13	5030 H8	F041 H12	I295 E5
2070 E11	6002 D7	F042 I12	I296 E4
2071 I7	6003 C6	F043 I12	I845 D9
2072 I7	6004 D5	F044 I12	I847 D1
2075 I8	6005 D5	F045 H8	I849 C1
2076 D13	6006 I3	F046 I9	I850 I4
2080 C8	6007 C6	F075 G11	I851 C6
2081 D13	6008 D6	F140 B12	I852 B8
3000 A1	6010 G4	F141 G13	I853 C12
3001 F5	6011 F4	F142 H6	I855 D7
3002 C1	6012 E7	F145 H7	I856 I11
3003 C1	6013 C7	F146 C12	I857 I11
3004 D1	6014 H5	F147 C13	I858 I11
3005 C2	6015 G5	F299 A8	I859 I11
3006 D2	6017 I4	F425 E5	I867 I12
3007 E1	6018 E4	I001 D9	I868 H9
3008 E1	6020 E4	I002 E10	I869 H9
3009 E1	6021 E10	I003 F10	c001 F8
3010 H1	6022 H1	I004 E10	c002 F7
3011 H1	6023 E13	I005 A2	c003 F8
3012 F3	6024 A4	I006 A3	
3013 G3	6025 A1	I007 C3	
3014 C7	6026 H3	I008 D2	
3015 C7	6027 C7	I009 C1	
3016 C6	6028 E7	I010 D2	
3017 D7	6029 G3	I011 C1	
3018 E7	6031 G11	I012 E4	
3019 E6	6032 A2	I013 B8	
3020 E6	6033 A3	I014 B7	
3021 G5	6038 D2	I015 F10	
3022 C11	6040 G11	I016 F10	
3023 D12	6041 E11	I017 G10	
3024 D12	6042 E13	I018 E2	

Display Supply (42”): DC / DC



1400 E7
2401 B4
2402 B4
2403 D3
2404 E4
2405 C7
2406 B8
2407 C5
2408 D6
2409 D3
2410 D4
2411 B3
3401 C3
3402 E8
3403 D4
3404 E4
3405 D4
3406 B3
3407 B2
3408 B2
3409 C7
3410 B7
3411 C8
3412 D8
3413 C8
3414 B10
3415 B9
3416 C10
3417 C10
3418 C5
3419 B2
3420 B10
3421 C1
3422 C2
3423 D2
3424 E1
3425 B8
3426 B9
3427 C8
3430 D4
5401 B4
5402 C3
6401 B3
6402 C3
6403 B3
6404 D1
6405 D3
6406 B9
6407 C9
6409 C10
7401 C6
7402 B2
7403 B8
7404 C9
7405 C9
7406 D2
7407 B8
9401 A2
9402 A2
9403 D9
9404 D9
9405 C3
9406 C3
9407 C10
I600 B2
I601 B3
I602 B8
I603 B9
I604 B10
I606 C4
I607 C7
I608 C10
I609 C9
I610 C7
I611 C8
I612 D7
I613 D5
I614 B3
I615 C8
I616 C9
I617 D1
I618 D2
I619 D2
I620 D1
I621 D5
I622 B3
I623 E7
I624 C5

Layout Display Supply Panel (42”) (Top Side)

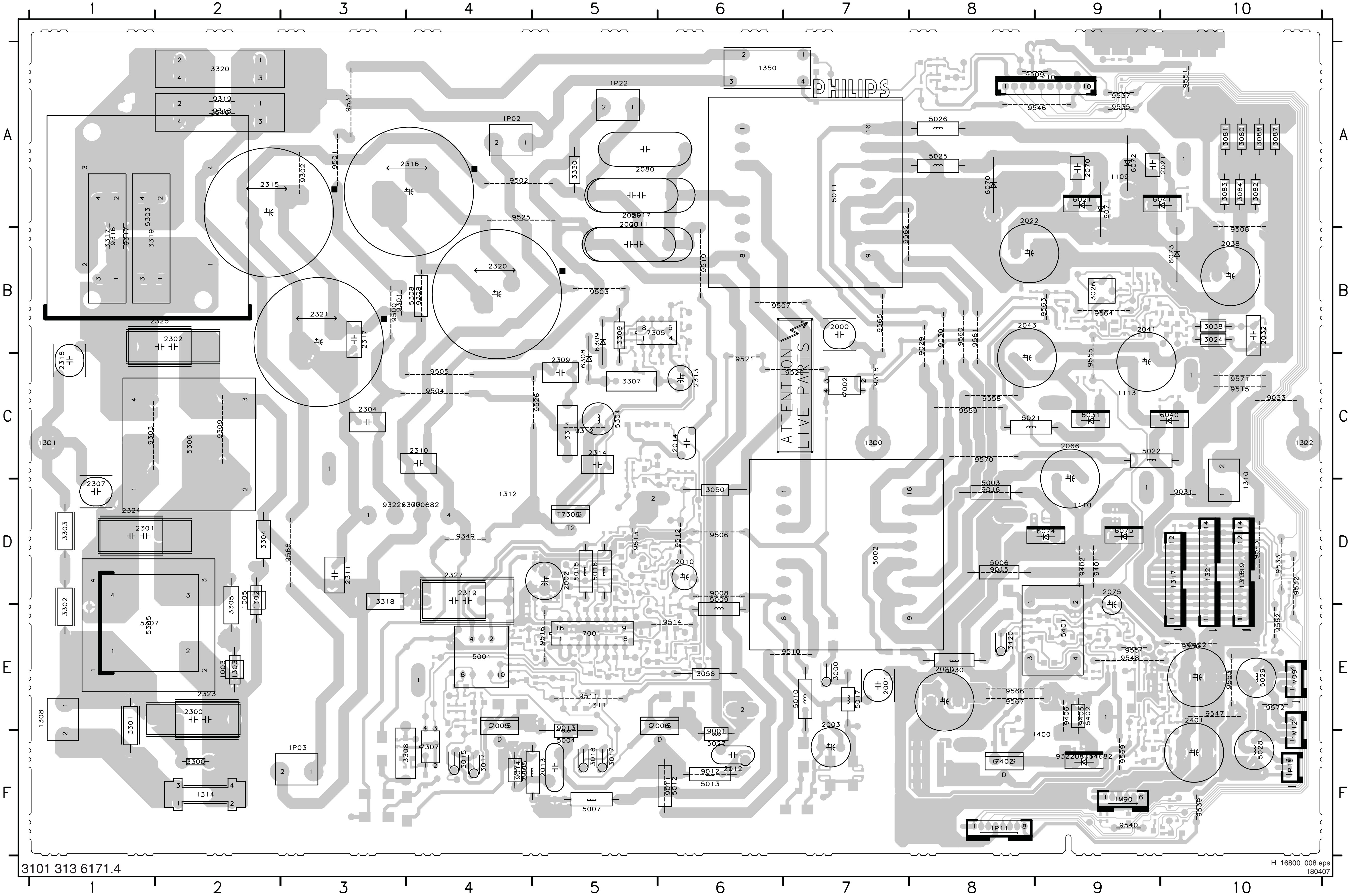
1003	E2	1310	D10	1400	E9	2000	B7	2020	F8
1005	E2	1311	E4	1M09	E10	2001	E7	2021	A10
1109	A10	1312	D3	1M12	F10	2002	D5	2022	A9
1110	D9	1314	F2	1M90	F9	2003	F7	2032	B10
1113	C10	1316	D10	1P02	A4	2010	D6	2038	B10
1300	C7	1317	D10	1P03	F3	2011	A5	2041	C9
1301	C1	1319	D10	1P10	A9	2012	F6	2043	B8
1302	E2	1321	D10	1P11	F8	2013	F5	2059	A5
1303	E2	1322	C10	1P15	F10	2014	C6	2060	B5
1308	E1	1350	A6	1P22	A5	2017	A5	2066	C9

2070	A9	2311	D3	2323	E2	3018	F5	3084	A10
2075	E9	2313	C6	2324	D2	3024	B10	3087	A10
2080	A6	2314	C5	2325	B2	3026	B9	3088	A10
2300	E2	2315	A2	2327	E4	3038	B10	3300	F2
2301	D2	2316	A3	2401	F10	3050	D6	3301	E1
2302	B2	2317	B3	2402	E10	3058	E6	3302	E1
2304	C3	2318	B1	3000	E7	3080	A10	3303	D1
2307	D1	2319	D4	3014	F4	3081	A10	3304	D2
2309	C5	2320	B5	3015	F4	3082	A10	3305	E2
2310	C4	2321	B3	3017	F5	3083	A10	3307	C5

3308	F3	5001	E4	5011	A7	5027	E6	5401	E9
3309	B5	5002	D8	5012	F5	5028	F10	5402	E9
3314	C5	5003	D8	5013	F6	5029	E10	6021	A9
3316	A1	5004	E5	5015	D5	5030	E8	6031	C9
3317	B1	5005	F4	5016	D5	5303	A1	6040	C10
3318	D3	5006	D8	5017	E7	5304	C5	6041	A10
3319	B2	5007	F5	5021	C8	5305	E1	6070	A8
3320	A1	5008	F5	5022	C9	5306	C2	6071	A9
3330	A5	5009	E6	5025	A8	5307	D1	6072	A9
3420	E8	5010	E7	5026	A8	5308	B4	6073	B9

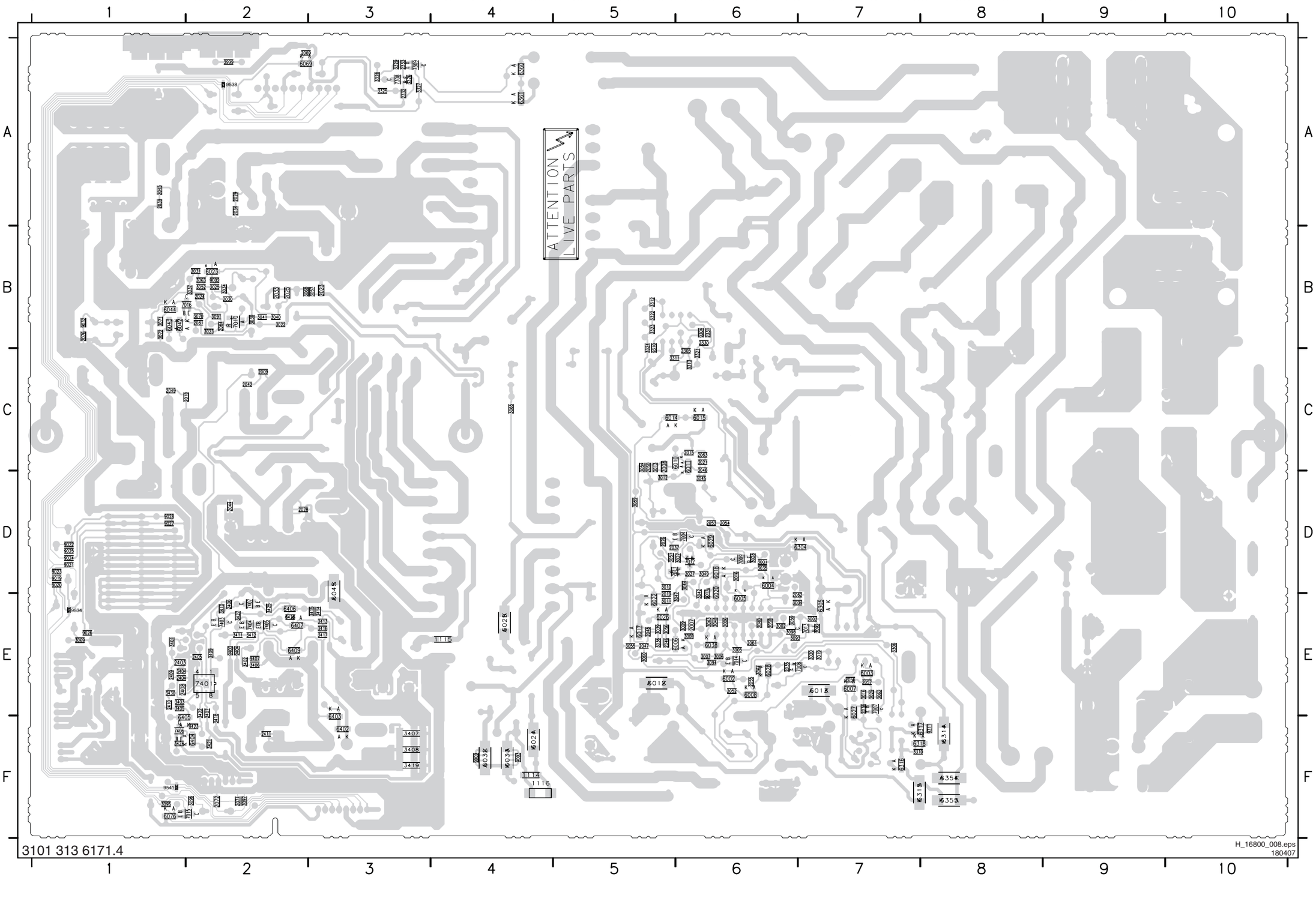
6074	D9	7305	B5	9015	D8	9309	C2	9405	E9
6075	D9	7306	D5	9016	D8	9312	C5	9406	E9
6307	D4	7307	F4	9029	B8	9315	C7	9500	B3
6308	B5	7402	F8	9030	B8	9316	B1	9501	A3
6309	B5	9001	F6	9031	D10	9317	B1	9502	A5
6401	F9	9008	D6	9033	C10	9318	A2	9503	B5
7001	E5	9011	F6	9301	B4	9319	A2	9504	C4
7002	C7	9012	F6	9302	A3	9349	D4	9505	C4
7005	F4	9013	F5	9303	C1	9401	D9	9506	D6
7006	F6	9014	F4	9308	B4	9402	D9	9507	B6

9508	B10	9520	C6	9540	F9	9555	B9	9567	E8
9509	A8	9521	B6	9543	D10	9558	C8	9568	D3
9510	E7	9525	A4	9546	A9	9559	C8	9569	F9
9511	E5	9526	C4	9547	E10	9560	B8	9570	C8
9512	D6	9531	A3	9548	E9	9561	B8	9571	C10
9513	D5	9532	D10	9550	E10	9562	B8	9572	E10
9514	E6	9533	D10	9551	A10	9563	B9		
9515	C10	9535	A9	9552	E10	9564	B9		
9516	E5	9537	A9	9553	E10	9565	B7		
9519	B6	9539	F10	9554	E9	9566	E8		



Layout Display Supply Panel (42”) (Bottom Side)

1114	F4	2018	C2	2030	B2	2042	C2	2053	D6	2064	B2	2332	A3	2410	E1	3008	E6	3021	C6	3035	D6	3045	D6	3056	E5	3069	E1	3095	F1	3321	C6	3401	E1	3410	E2	3419	F3	3999	A2	6011	C6	6023	B2	6038	E6	6314	F8	6402	F3	7008	E7	7308	A3	9003	F4	9025	D1	9404	E2
1115	E4	2019	E5	2031	B2	2044	D2	2054	D6	2069	A2	2333	A3	2411	F2	3009	E6	3022	B2	3036	E5	3046	C6	3057	B3	3070	B2	3096	F2	3322	B5	3402	E2	3411	E2	3421	F2	6002	E6	6012	E5	6024	F4	6042	B2	6315	F8	6403	F3	7009	D6	7309	A3	9009	F4	9026	E1	9407	E2
1116	F5	2023	B3	2033	B2	2045	A1	2055	E6	2071	F2	2403	E1	3001	D6	3010	D5	3023	B2	3037	B2	3047	E6	3059	E6	3071	B1	3097	F2	3323	B5	3403	E1	3412	E2	3422	E2	6003	E7	6013	E7	6025	E4	6043	B1	6316	F7	6404	F2	7010	B2	7401	E2	9017	E6	9027	D1	9534	E1
2006	E6	2024	B2	2034	A2	2046	E5	2056	E7	2072	F2	2404	E1	3002	E6	3011	E5	3025	B2	3039	E5	3048	E6	3060	E5	3072	B1	3098	E6	3324	B5	3404	E1	3413	E3	3423	F2	6004	D6	6014	C5	6026	E5	6044	B1	6317	F8	6405	E1	7011	D5	7403	E2	9019	D1	9028	D1	9538	A2
2007	E6	2025	B2	2035	E6	2047	E5	2057	E7	2076	B1	2405	E2	3003	E7	3012	D5	3027	D6	3040	B2	3049	D6	3061	E6	3089	D5	3306	E7	3325	A3	3405	E1	3414	E3	3424	F1	6005	E6	6015	C6	6027	E7	6045	D3	6318	F7	6406	E2	7012	D6	7404	E2	9020	D1	9032	B1	9541	F1
2008	C5	2026	D5	2036	E7	2048	E5	2058	E6	2081	B2	2406	E2	3004	E6	3013	C5	3028	D6	3041	B2	3051	D5	3062	E7	3091	B2	3310	F7	3326	A3	3406	E2	3415	E3	3425	E2	6006	E5	6017	E5	6028	E6	6069	A2	6354	F8	6407	E2	7013	E7	7405	E2	9021	D1	9304	B6			
2009	C2	2027	D6	2037	D5	2049	C1	2061	E6	2305	C6	2407	E2	3005	E6	3016	E7	3029	E7	3042	E6	3052	B2	3063	B2	3092	E7	3311	C5	3327	A3	3407	F3	3416	E3	3426	E2	6007	E7	6018	D6	6029	D6	6076	F1	6355	F8	6409	E2	7014	E6	7406	F1	9022	D1	9310	B5			
2015	C6	2028	D2	2039	A1	2050	C5	2062	E6	2330	B6	2408	E1	3006	E6	3019	E7	3030	B2	3043	E6	3054	C5	3065	C4	3093	E6	3312	B5	3328	A3	3408	F3	3417	E3	3427	E2	6008	E6	6020	D6	6032	F4	6304	D7	6360	A4	7004	D6	7015	F2	7407	E2	9023	D1	9311	F8			
2016	D6	2029	A2	2040	E6	2052	E6	2063	C6	2331	B6	2409	E1	3007	E6	3020	E7	3034	B2	3044	D6	3055	E5	3068	B2	3094	E6	3313	C6	3329	A3	3409	E2	3418	F2	3430	E1	6010	C5	6022	E5	6033	F4	6305	E7	6361	A4	7007	E7	7016	B2	9002	B2	9024	D1	9403	E2			



DFI Panel: DC - DC

1M09 E13 1M12 E14 1M90 D13 1U01 C11 1U02 C11 1U11 D13 1U12 D14 1U13 D14 2U00 B2 2U01 A5 2U02 A9 2U03 A9 2U04 A6 2U05 B4 2U006 A9 2U007 C7 2U008 B8 2U009 B9 2U10 D9 2U11 A11 2U12 D10 2U13 C7 2U14 D10 2U15 C6 2U16 C7 2U17 D3 2U18 D6 2U19 D4 2U20 D5 2U21 D9 2U22 D11 2U23 E8 2U24 E8 2U25 B9 2U26 E7 2U27 E8 2U28 F8 2U29 F6 2U30 F10 2U31 D3 2U32 H10 2U33 F11 2U34 G2 2U35 H11 2U36 H2 2U37 H2 2U40 E9 2U41 A8 3U00 B3 3U01 B4 3U02 D2 3U03 A5 3U05 B2 3U06 B5 3U07 B3 3U08 B7 3U09 B5 3U10 C6 3U11 B7 3U12 C2 3U13 C3 3U14 C3 3U15 B5 3U16 E8 3U17 B7 3U18 E7 3U19 C6 3U20 C5 3U21 B5 3U22 C6 3U23 C6 3U24 C7 3U25 F10 3U26 D6 3U27 D7 3U28 F11 3U30 B3 3U31 D6 3U32 D4 3U33 D5 3U34 D1 3U35 E1 3U36 D6 3U37 D6 3U40 D6 3U41 E10 3U43 E5 3U44 E10 3U45 E7 3U46 E8 3U47 E9 3U48 E7 3U50 E10 3U55 E8 3U58 E9 3U59 E10 3U62 F7 3U63 F8 3U64 F10 3U68 F8 3U69 F10 3U72 D9 3U73 G10 3U74 H1 3U75 H1 5U00 A10 5U02 E8 5U04 C12 5U05 C12 5U06 C12 5U07 C12 6U00 B3 6U01 F11 6U02 F11 6U04 E7 6U06 E7 6U08 F7 6U00 C4 7U01-1 A5 7U01-2 B6 7U03-1 C6 7U03-2 B6 7U07 E2 7U07 F7 7U08 G11 7U09 G12 7U13-1 C3 7U13-2 B2 7U15-1 E10 7U15-2 E10 9U01 F13 9U02 F14 9U03 H9 FU01 B7 FU02 C12 FU03 C4 FU04 D13 FU05 D6 FU06 D9 FU07 E11 FU10 D14 FU11 G13 FU12 C11 IU00 A10 IU01 A7 IU02 A5 IU03 B4 IU04 E9 IU05 B3 IU06 B2 IU07 B3 IU08 B6 IU09 D4 IU11 B3 IU12 B2 IU13 B5 IU16 B6 IU17 C7 IU18 C7 IU20 C6 IU21 C5 IU26 C5 IU27 C7 IU28 C4 IU30 C5 IU31 C4 IU33 C5 IU34 C6 IU35 C12 IU36 D6 IU37 D6 IU38 D4 IU39 D4 IU40 D5 IU43 D6 IU46 D5 IU47 E6 IU48 E5 IU50 E7 IU51 E10 IU52 E8 IU53 E8 IU54 E7 IU55 E8 IU57 E10 IU59 E10 IU60 E8 IU61 E13 IU62 E13 IU63 F7 IU64 F7 IU65 F11 IU68 H2 IU69 E1 IU70 D2

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

AB01 DC / DC

AB01

A B C D E F G H

12V/3V3 CONVERSION

12V/1V2 CONVERSION

BOOSTER

TO SUPPLY

TO SUPPLY

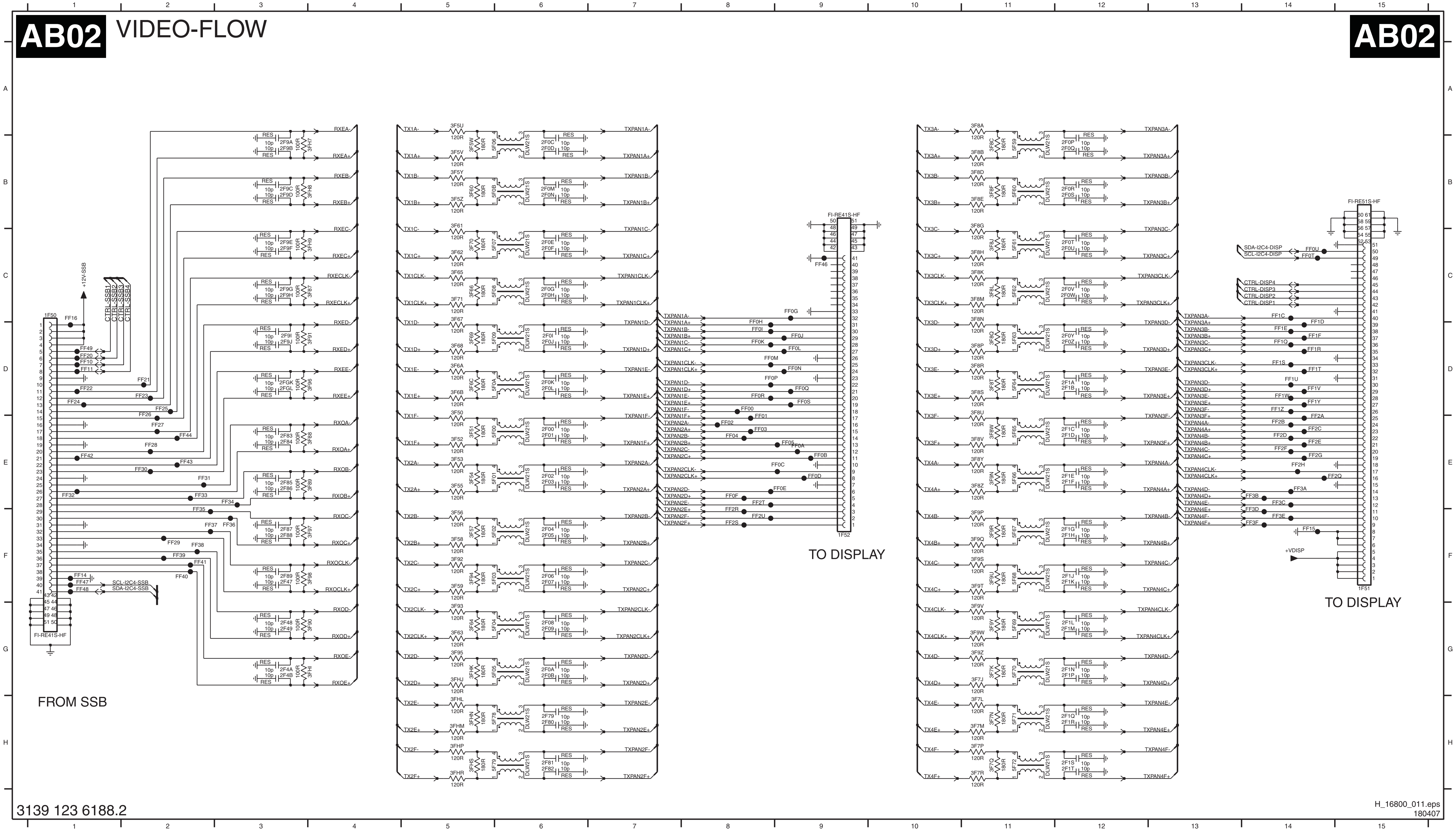
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DFI Panel: Video Flow

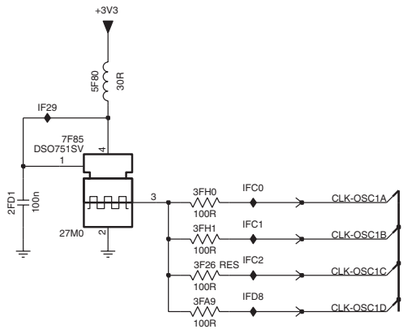
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1F51 F15	2F07 F6	2F0G C6	2F0Q B12	2F1A D12	2F1K F12	2F47 F3	2F83 E3	2F9C B3	2FGL D3	3F58 F5	3F62 C5	3F6B D5	3F7P H11	3F8D B11	3F8N C11	3F8Y E11	3F97 F3	3F9V G11	3FHK G5	5F02 F6	5F0B B6	5F67 F11	FF01 E8	FF0E E9	FF0N D9	FF14 F1	FF1S D14	FF22 D1	FF2B E14	FF2S F8	FF36 F3	FF3F F14	FF49 D1
1F52 F9	2F08 G6	2F0H C6	2F0R B12	2F1B D12	2F1L G12	2F48 G3	2F84 E3	2F9D B3	3F50 D5	3F59 F5	3F63 G5	3F6C D5	3F7Q H11	3F8E B11	3F8P D11	3F8Z E11	3F98 F3	3F9W G11	3FHL H5	5F03 F6	5F59 B11	5F68 F11	FF02 E8	FF0F E8	FF0P D8	FF15 F14	FF1T D14	FF23 D2	FF2C E14	FF2T E8	FF37 F2	FF40 F2	
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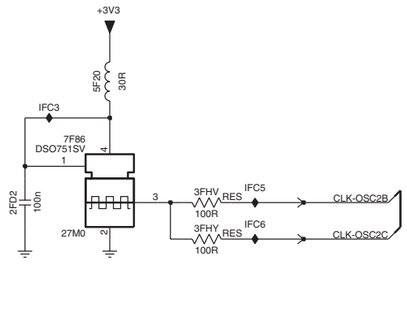
DFI Panel: Clock

AB03 CLOCK

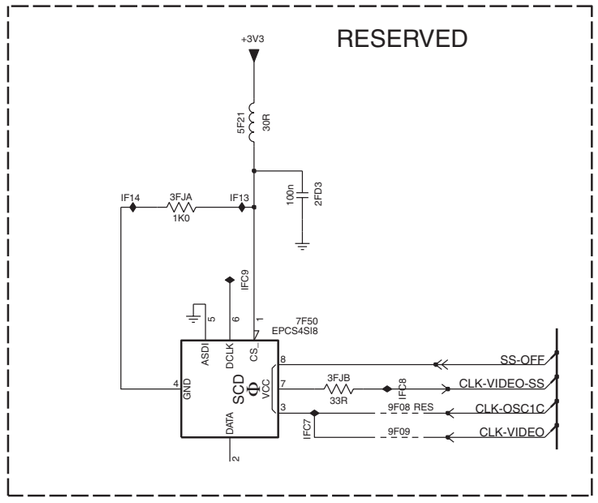
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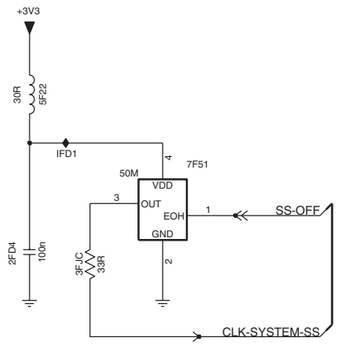


Video-clock RESERVED



RESERVED





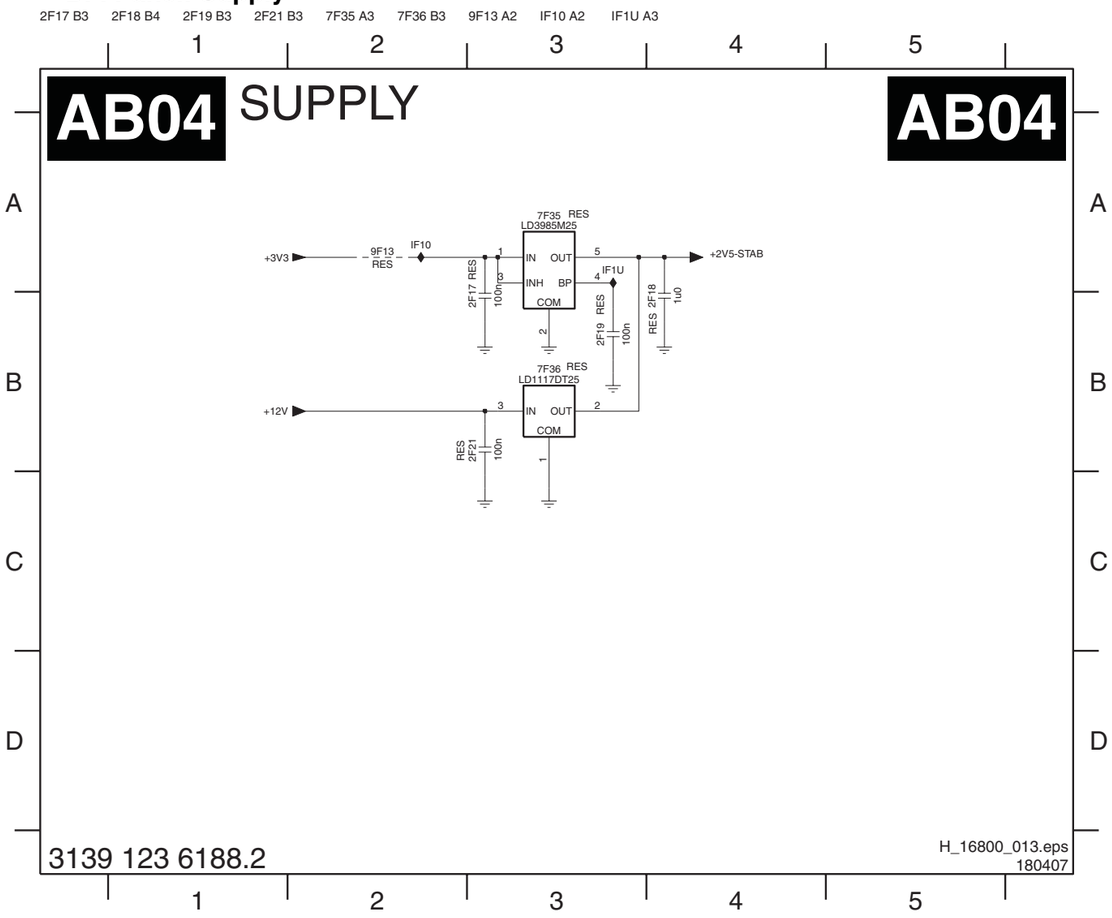
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2FD2 C6
2FD3 F3
2FD4 G5
3F26 C4
3FA9 D4
3FH0 C4
3FH1 C4
3FHV C7
3FHY C7
3FJA F2
3FJB G3
3FJC F6
5F20 B6
5F21 E3
5F22 F6
5F80 B3
7F50 G3
7F51 G6
7F85 C3
7F86 C6
9F08 G3
9F09 G3
IF13 F3
IF14 F2
IF29 B3
IFC0 C4
IFC1 C4
IFC2 C4
IFC3 B6
IFC5 C7
IFC6 C7
IFC7 G3
IFC8 G3
IFC9 F3
IFD1 G6
IFD8 D4

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180407

DFI Panel: Supply



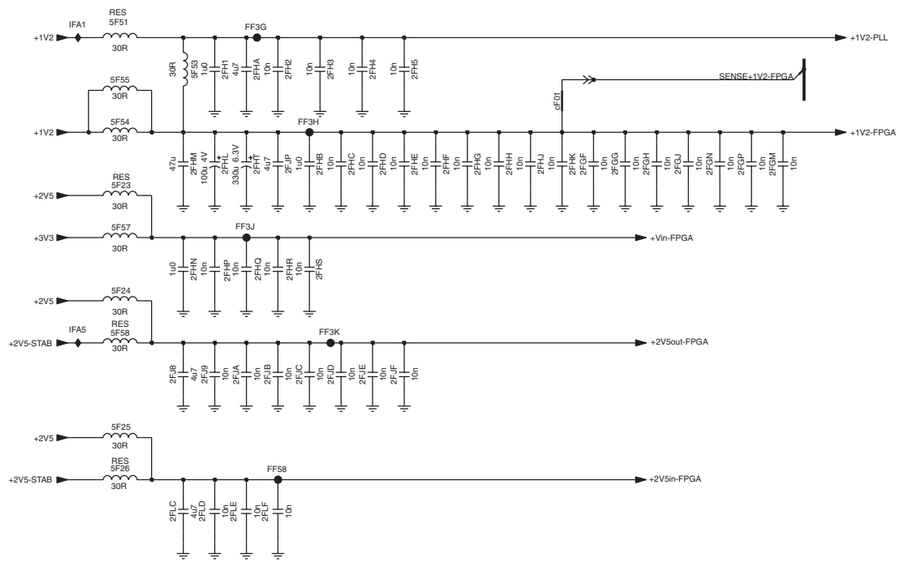
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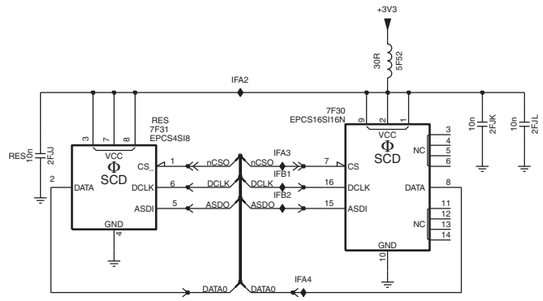
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DFI Panel: FPGA: Power & Control

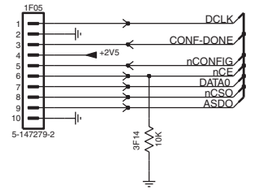
AB05 FPGA: POWER + CONTROL

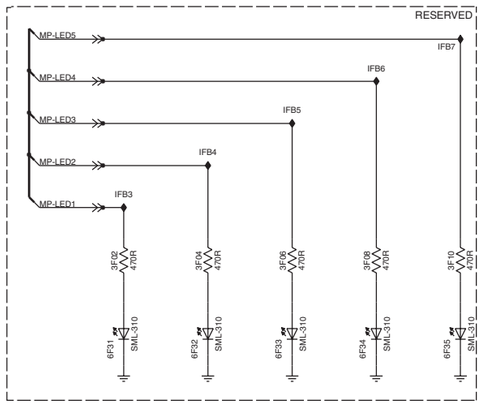
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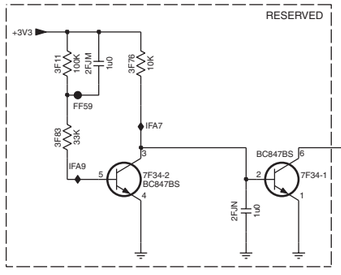


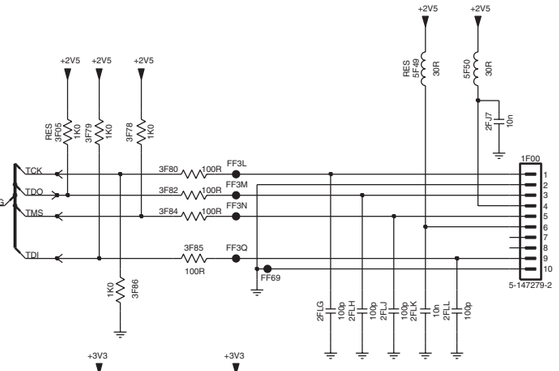


ACTIVE SERIAL DEBUG-CONNECTOR

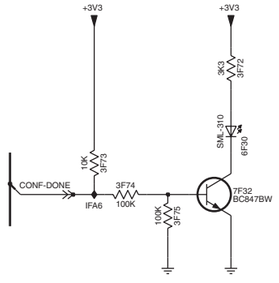








FOR DEBUG



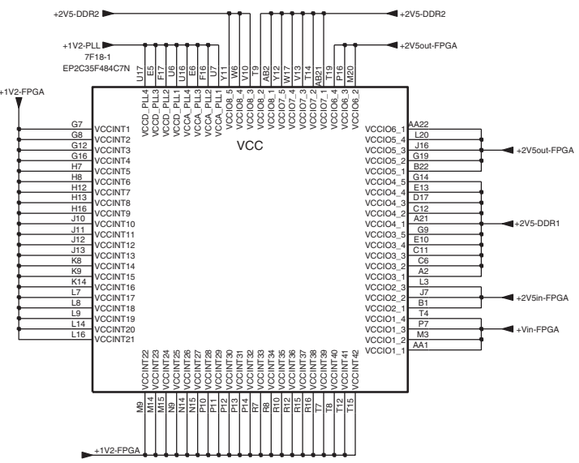
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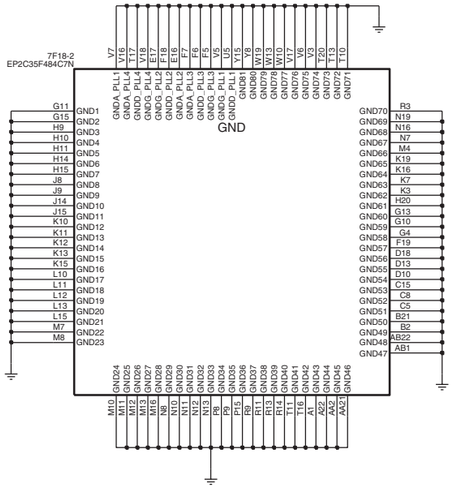
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2FH2 A3
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2FHC B3
2FHD B4
2FHE B4
2FHF B4
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2FLL H12
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3F06 G5
3F08 G6
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3F11 F7
3F14 D13
3F72 H11
3F73 I10
3F74 I10
3F75 I11
3F76 F7
3F78 F10
3F79 F10
3F80 G11
3F81 G9
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3F83 G7
3F84 G11
3F85 G11
3F86 G10
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5F24 C2
5F25 D2
5F26 D2
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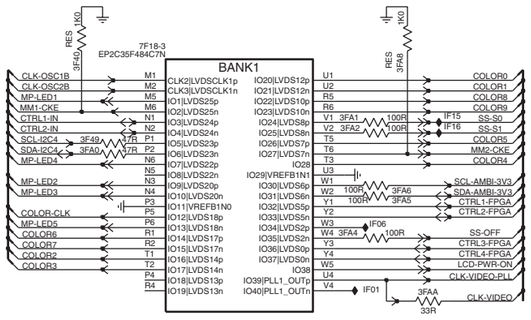
DFI Panel: FPGA: DFI

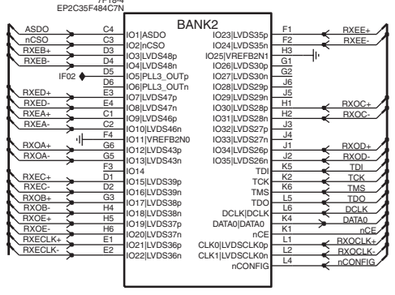
AB06 FPGA DFI

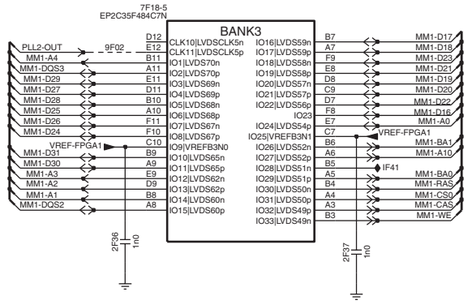
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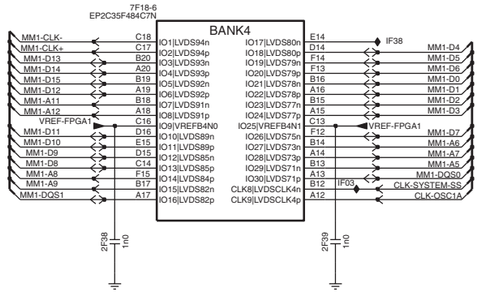


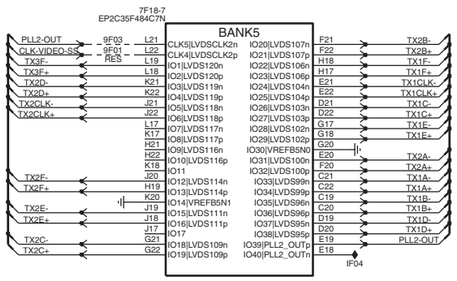


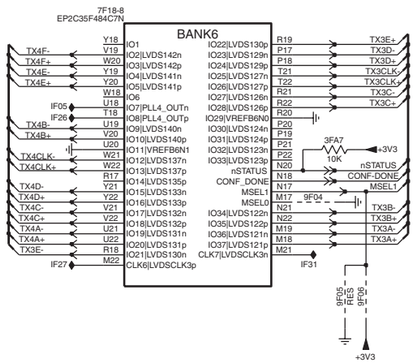


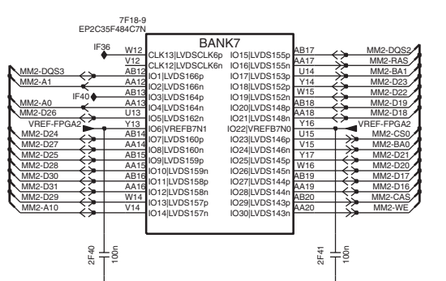


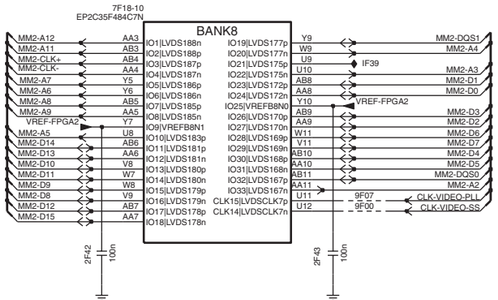








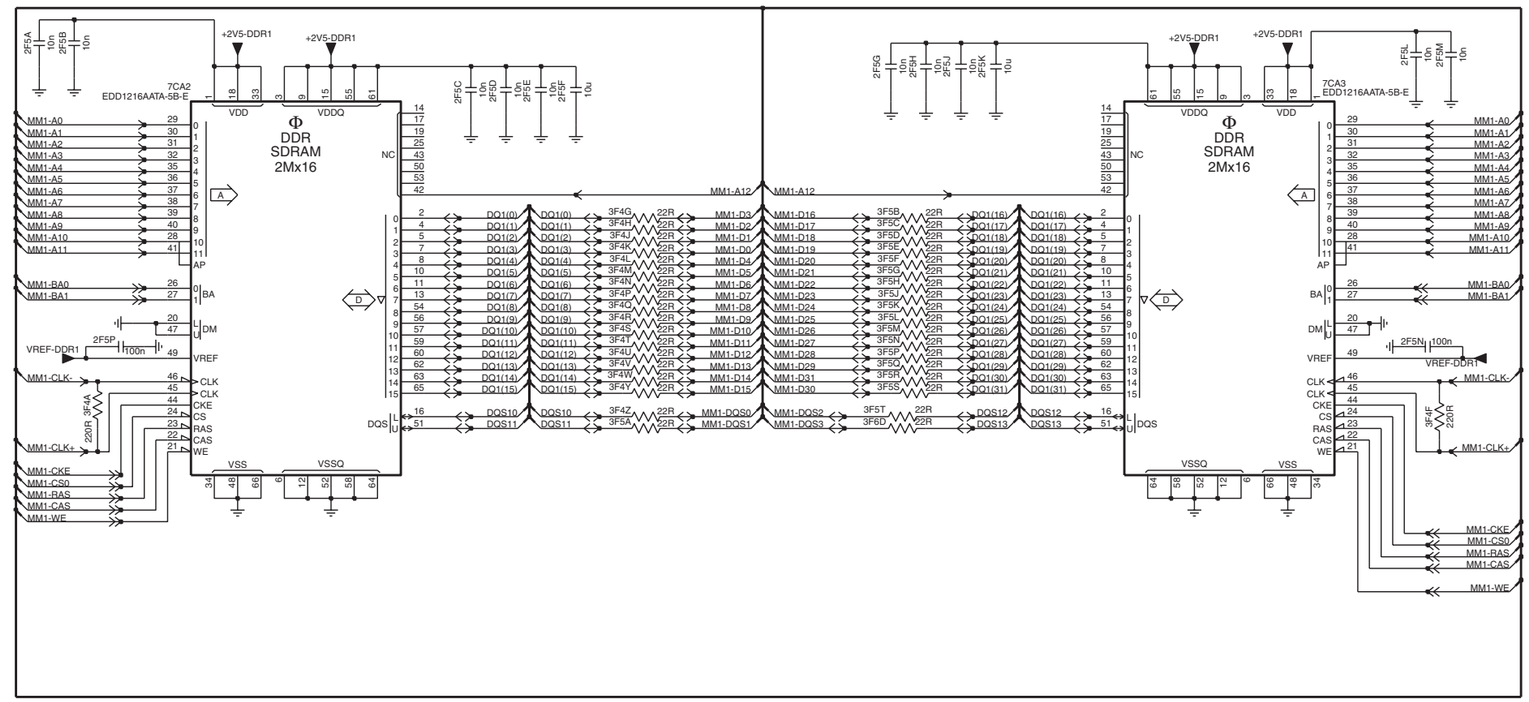


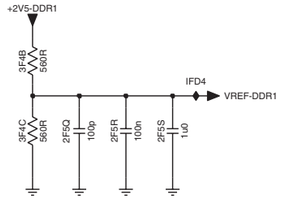


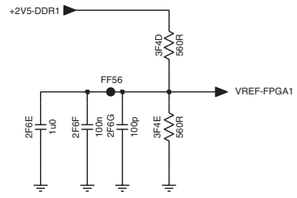
DFI Panel: DDR A

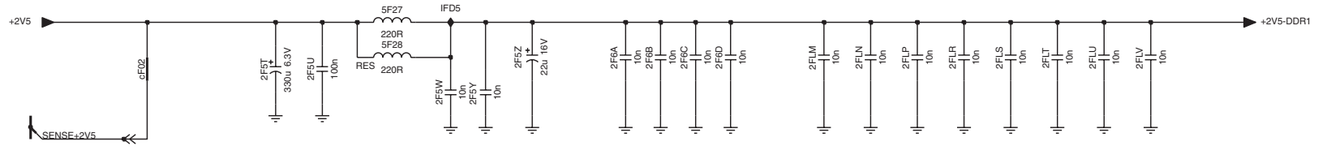
AB07 DDR A

AB07









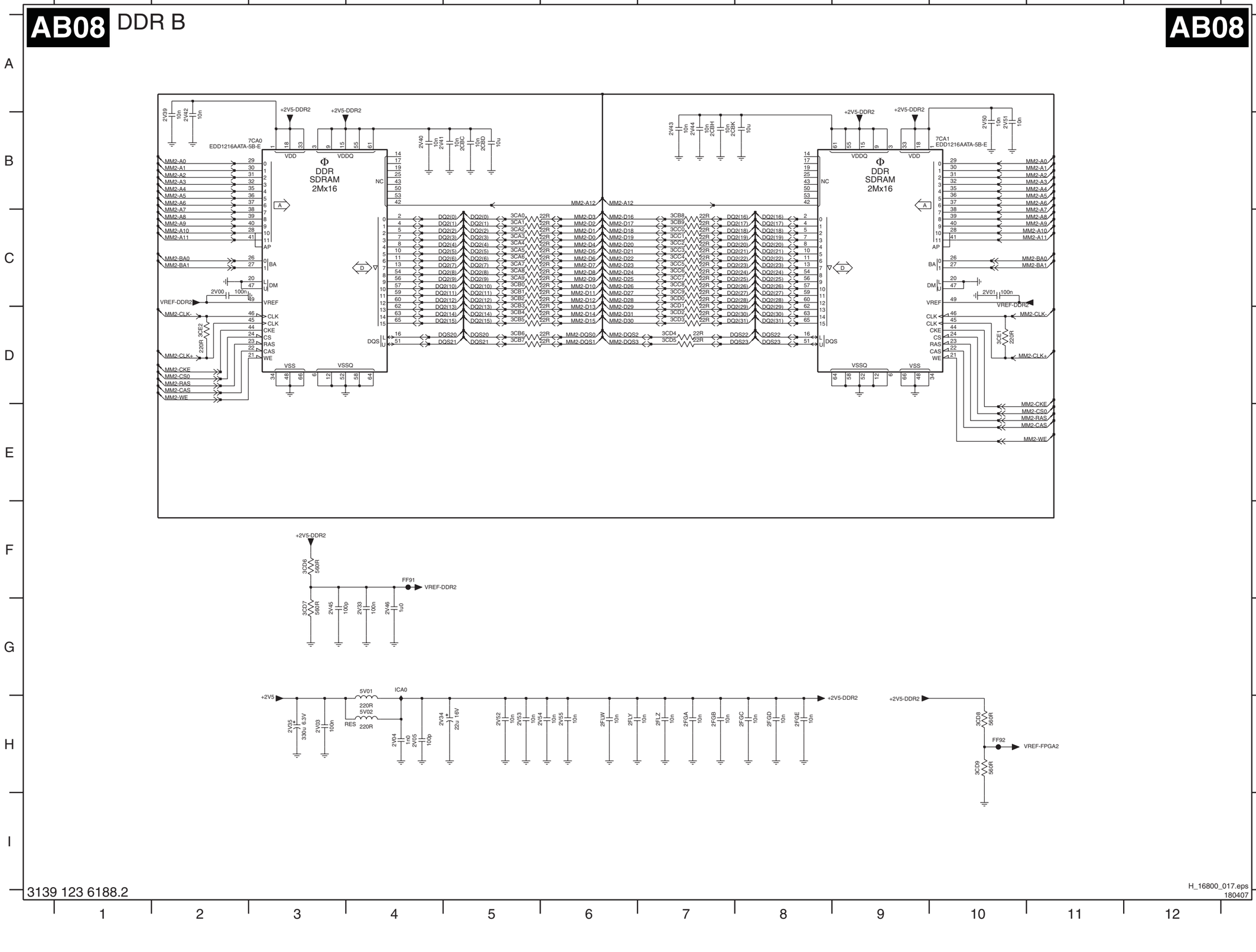
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180407

2F5A B2
2F5B B2
2F5C B5
2F5D B5
2F5E B5
2F5F B5
2F5G B7
2F5H B7
2F5J B7
2F5K B8
2F5L B10
2F5M B11
2F5N C10
2F5P C2
2F5Q G4
2F5R G4
2F5S G4
2F5T H3
2F5U H3
2F5W H4
2F5Y H4
2F5Z H5
2F6A H5
2F6B H5
2F6C H6
2F6D H6
2F6E G6
2F6F G6
2F6G G6
2FLM H6
2FLN H7
2FLP H7
2FLR H7
2FLS H8
2FLT H8
2FLU H8
2FLV H8
3F4A D2
3F4B F3
3F4C G3
3F4D F7
3F4E G7
3F4F D10
3F4G C5
3F4H C5
3F4J C5
3F4K C5
3F4L C5
3F4M C5
3F4N C5
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3F4R C5
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3F4T C5
3F4U D5
3F4V D5
3F4W D5
3F4Y D5
3F4Z D5
3F5A D5
3F5B C7
3F5C C7
3F5D C7
3F5E C7
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3F5G C7
3F5H C7
3F5J C7
3F5K C7
3F5L C7
3F5M C7
3F5N C7
3F5P D7
3F5Q D7
3F5R D7
3F5S D7
3F5T D7
3F6D D7
5F27 H4
5F28 H4
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7CA3 B10
FF56 F6
IFD4 F4
IFD5 H4
cF02 H2

DFI Panel: DDR B

AB08 DDR B

AB08

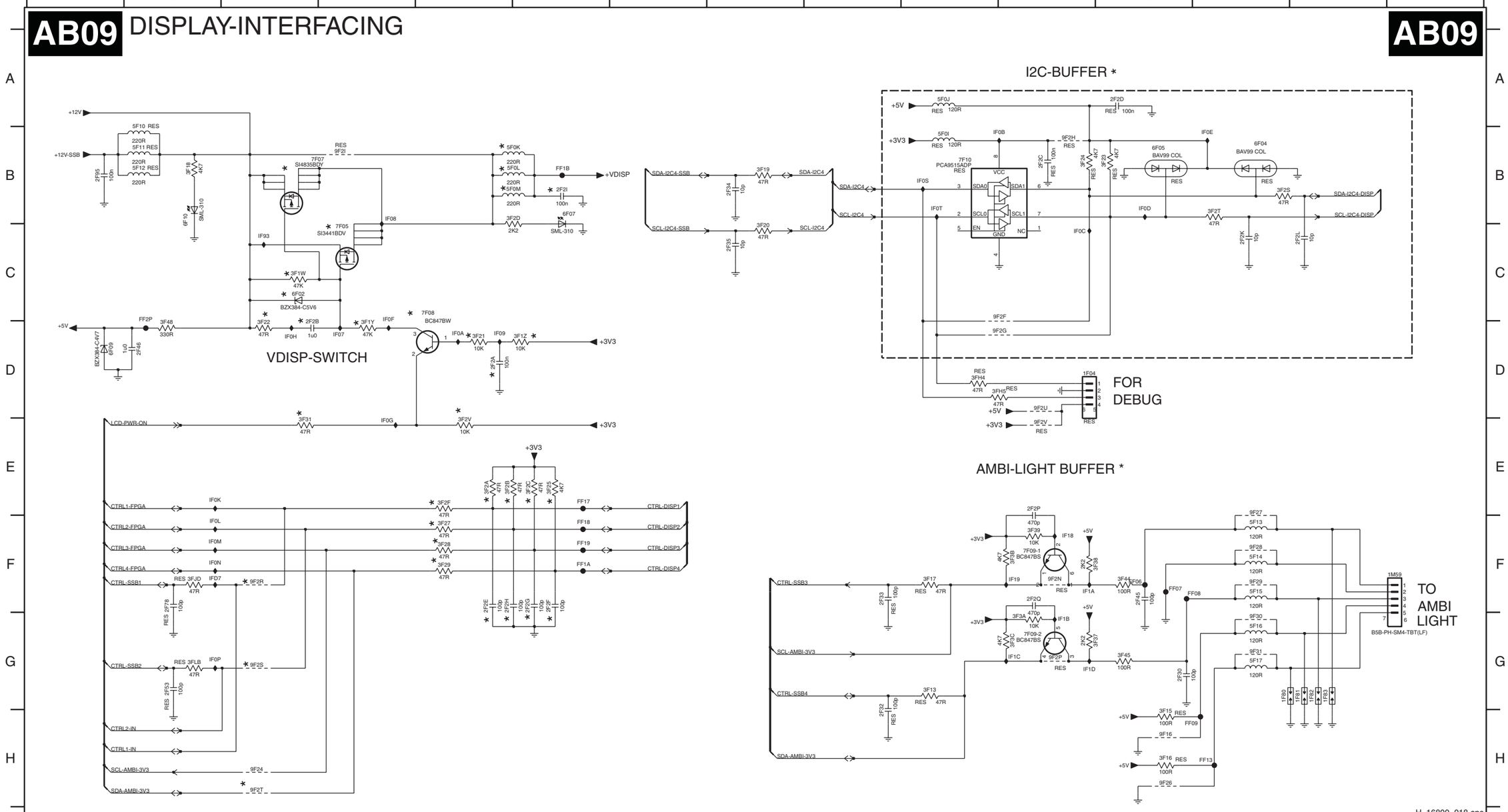


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2CBH B7
2CBK B7
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2FGB H7
2FGC H8
2FGD H8
2FGE H8
2FLW H6
2FLY H6
2FLZ H7
2V00 C2
2V01 C10
2V03 H3
2V04 H4
2V05 H4
2V33 G4
2V34 H4
2V35 H3
2V39 B2
2V40 B4
2V41 B5
2V42 B2
2V43 B7
2V44 B7
2V45 G3
2V46 G4
2V50 B10
2V51 B10
2V52 H5
2V53 H5
2V54 H6
2V55 H6
3CA0 C5
3CA1 C5
3CA2 C5
3CA3 C5
3CA4 C5
3CA5 C5
3CA6 C5
3CA7 C5
3CA8 C5
3CA9 C5
3CB0 C5
3CB1 C5
3CB2 C5
3CB3 D5
3CB4 D5
3CB5 D5
3CB6 D5
3CB7 D5
3CB8 C7
3CB9 C7
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3CD2 D7
3CD3 D7
3CD4 D7
3CD5 D7
3CD6 F3
3CD7 G3
3CD8 H10
3CD9 H10
3CE1 D10
3CE2 D2
5V01 G4
5V02 H4
7CA0 B3
7CA1 B10
FF91 F4
FF92 H10
ICA0 G4

DFI Panel: Display Interfacing

1F04 D11	2F2A D5	2F2G F6	2F2Q F11	2F45 F12	3F15 H12	3F1Y D4	3F24 B11	3F2B E5	3F2V E5	3F3B F11	3FH5 D11	5F0L B6	5F14 F13	6F05 B12	7F08 C5	9F26 H12	9F2H B11	9F2T H3	FF07 F12	FF19 F6	IF09 D5	IF0F C4	IF0N F2	IF1A F11
1F80 G13	2F2B D3	2F2H F5	2F30 G12	2F46 D2	3F16 H12	3F1Z D6	3F25 E6	3F2C E6	3F31 E3	3F3C G11	3FJD F2	5F0M B6	5F15 F13	6F07 B6	7F09-1 F11	9F27 E13	9F2I B4	9F2U D11	FF08 F13	FF1A F6	IF0A D5	IF0G E4	IF0P G2	IF1B G11
1F81 G14	2F2C B11	2F2I B6	2F32 H9	2F53 G2	3F17 F10	3F20 C8	3F27 F5	3F2D B6	3F37 G11	3F44 F12	3FLB G2	5F10 B2	5F16 G13	6F09 D1	7F09-2 G11	9F28 F13	9F2N F11	9F2V E11	FF09 H12	FF1B B6	IF0B B11	IF0H D3	IF0S B10	IF1C G11
1F82 G14	2F2D A12	2F2K C13	2F33 F9	2F78 F2	3F18 B2	3F21 D5	3F28 F5	3F2F E5	3F38 F11	3F45 G12	3FLB G2	5F11 B2	5F17 G13	6F10 B2	7F10 B10	9F29 F13	9F2P G11	9F30 G13	FF13 H13	FF2P C2	IF0C C11	IF0K E2	IF0T B10	IF1D G11
1F83 G14	2F2E F5	2F2L C14	2F34 B8	2F95 B1	3F19 B8	3F22 D3	3F29 F5	3F2S B13	3F39 F11	3F48 D2	5F0J A10	5F12 B2	6F02 C3	7F05 C4	9F16 H12	9F2F C11	9F2R F3	9F31 G13	FF17 E6	IF07 D4	IF0D B12	IF0L F2	IF18 F11	IF93 C3
1M59 F15	2F2F F6	2F2P E11	2F35 C8	3F13 G10	3F1W C3	3F23 B12	2FA E5	3F2T B13	3F3A G11	3FH4 D10	5F0K B6	5F13 F13	6F04 B13	7F07 B4	9F24 H3	9F2G D11	9F2S G3	FF06 F12	FF18 F6	IF08 B4	IF0E B13	IF0M F2	IF19 F11	IFD7 F2



3139 123 6188.2

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DFI Panel: FPGA Ambilight

AB10 FPGA AMBILIGHT

AB10

XCF flash- RESERVED

FOR DEBUG

FOR FACTORY USE

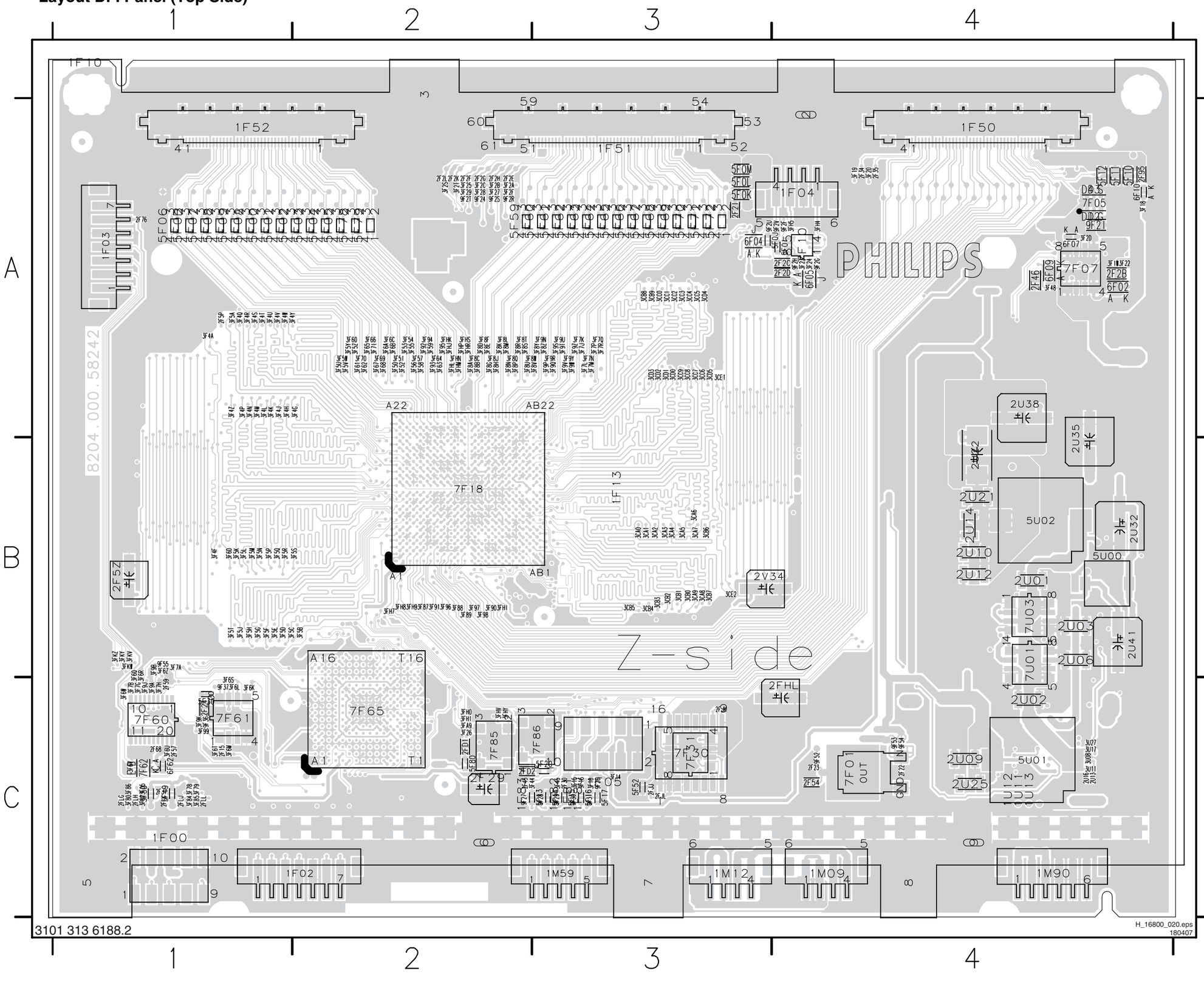
HIGH=SPI flash
LOW=XCF flash

3139 123 6188.2

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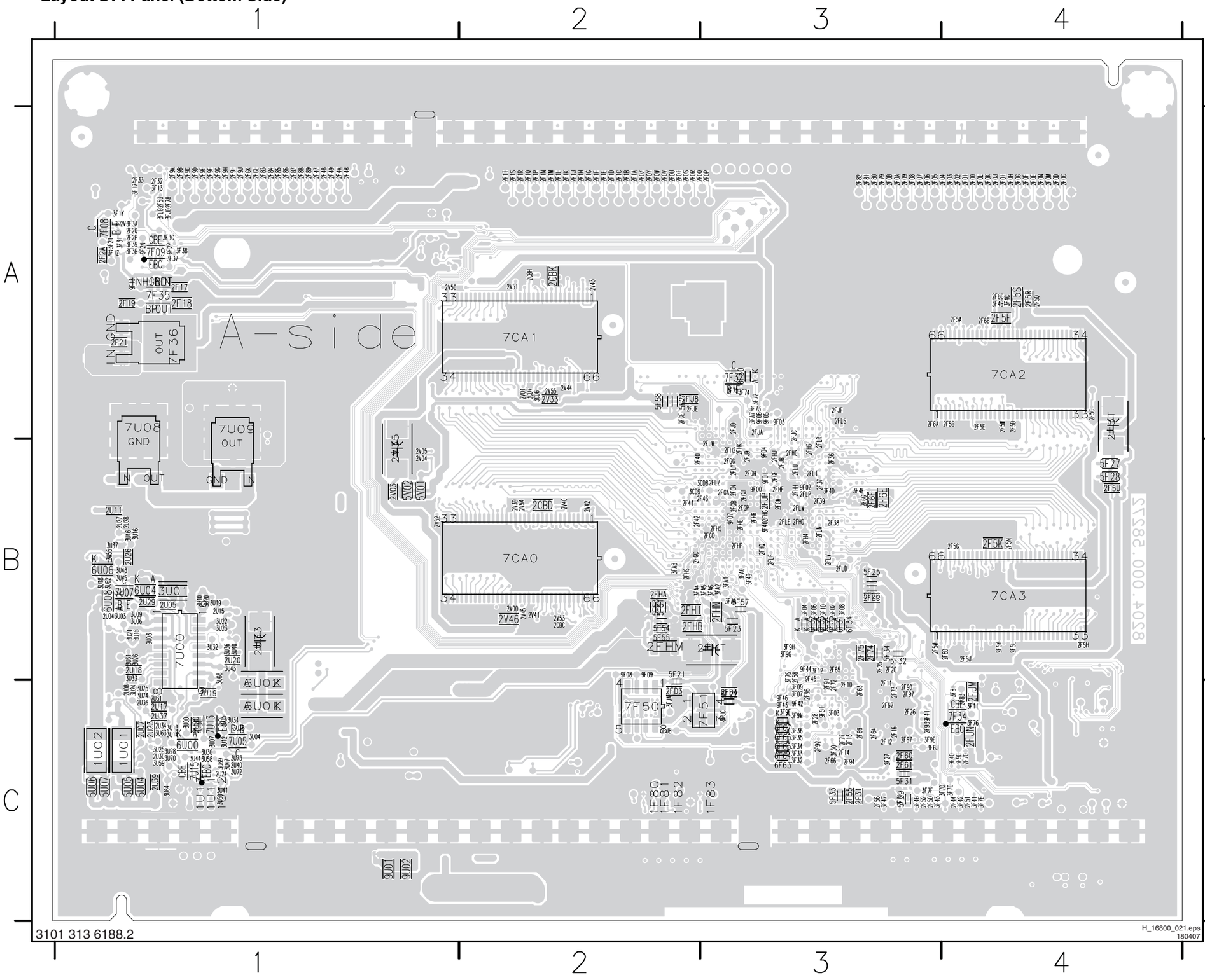
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2F11 B4	7F62 G3
2F12 B4	7F65-1 F7
2F13 B4	7F65-2 A7
2F14 G9	7F65-3 A10
2F15 I13	7F65-4 E10
2F16 B3	7F65-5 A13
2F20 A2	9F36 H12
2F22 D2	9F37 H12
2F23 D3	9F40 G5
2F24 H13	9F41 B8
2F25 B2	9F42 F9
2F26 B3	9F43 I9
2F27 B3	9F44 F11
2F28 B3	9F45 F11
2F29 B2	9F46 F11
2F31 B2	9F51 G11
2F44 E14	9F52 C2
2F50 F14	9F53 C2
2F51 F14	9F54 C2
2F52 F14	9F55 G4
2F54 D3	FF50 F14
2F55 B2	FF51 I3
2F56 F14	FF52 H3
2F57 E5	FF53 H5
2F58 F11	FF54 H4
2F59 F3	FF55 H4
2F60 A2	FF60 A3
2F61 A2	FF61 B3
2F62 A3	FF62 B3
2F63 A3	FF63 H12
2F64 A3	FF64 I12
2F65 A3	FF65 I12
2F66 A3	FF66 I12
2F67 A4	FF67 I12
2F68 E4	FF68 I14
2F69 A4	FF80 F13
2F70 G5	FF81 E14
2F71 F12	FF82 F14
2F72 B3	FF83 F14
2F73 B3	FF84 F14
2F74 B2	FF85 F12
2F75 B2	IF12 C2
2F76 I4	IF48 F5
2F77 B3	IF49 I9
2F90 A4	IF52 A6
2F91 A4	IF53 H2
2F92 A4	IF54 I2
2F93 B3	IF55 I2
2F94 B4	IF56 I2
2F96 B4	IF57 I2
2F97 B4	IF61 C3
3F03 H9	IF69 H4
3F07 F11	IF71 G9
3F09 F11	IF72 G9
3F12 G11	IF73 H9
3F30 F8	IF74 B6
3F32 H2	IF75 G11
3F33 I2	IF76 H13
3F34 I2	IF77 A9
3F35 I2	IF78 A9
3F36 I2	IF79 B9
3F41 E12	
3F42 E13	
3F43 E13	
3F46 E13	
3F47 F14	
3F6J A6	
3F6K H12	
3F6L I12	
3F6M H14	
3F6Q E2	
3F6R E2	
3F6S E3	
3F6T E3	
3F6U G2	
3F6V G3	
3F6W G3	
3F6Z F4	
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3F7B G4	
3F7C H3	
3F7D H2	
3F7E H3	
3F7F H3	
3F7G H5	
3F7H H5	
3F7S F11	
3F99 I12	
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3F9B I3	
3F9C F5	
3F9E A8	
3F9F H9	
3F9G I9	
3F9H I9	
3F9J F5	
3F9K H12	
3F9M I9	
3FKV H4	
3FKW H4	
3FKY H4	
3FKZ H4	
5F29 F13	
5F30 H13	
5F31 A2	
5F32 B2	
5F33 B2	
5F34 A2	
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6F63 H2	
6F64 I2	
6F65 I2	
6F66 I2	
6F67 I2	

Layout DFI Panel (Top Side)



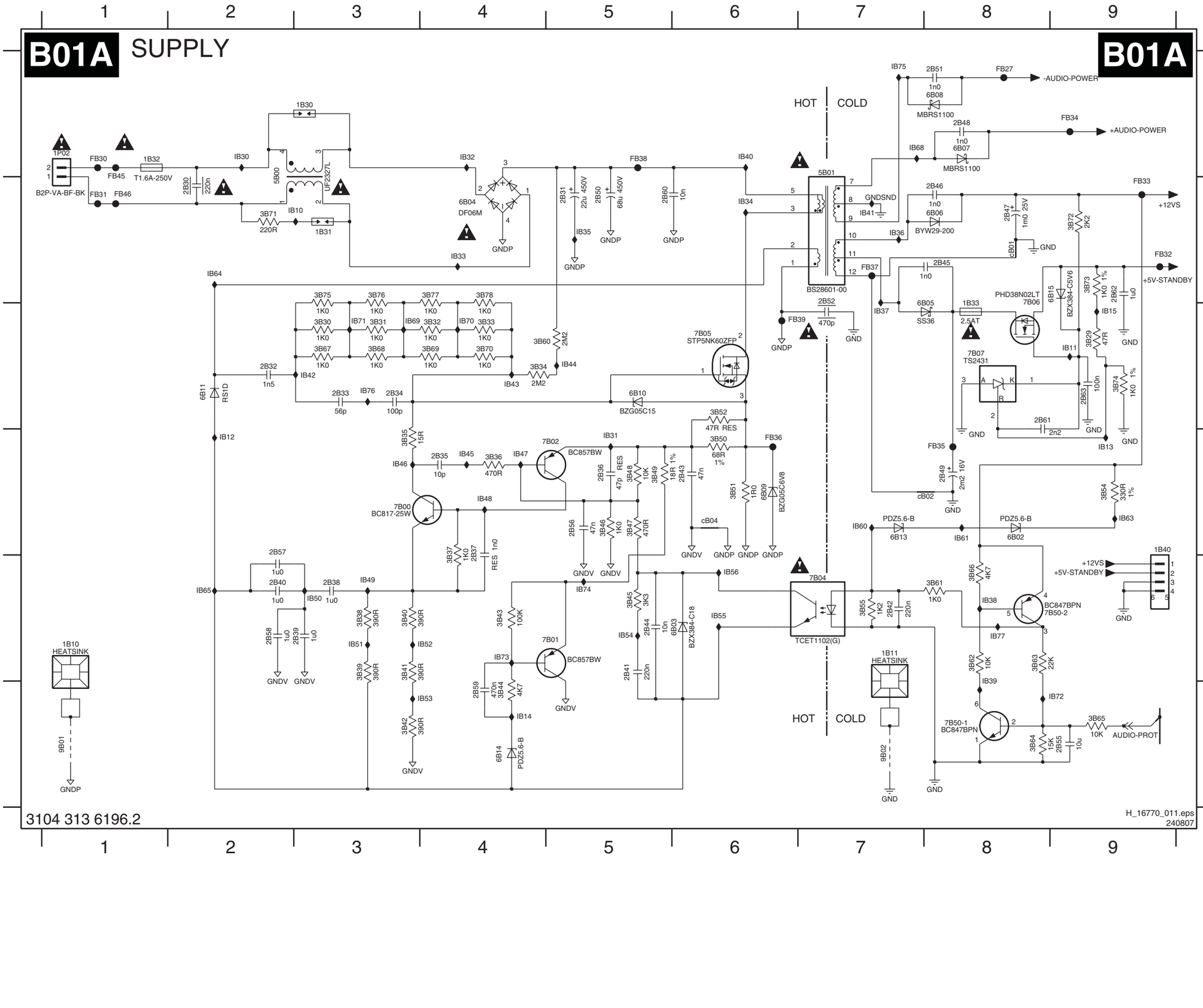
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1F03	A1	3F14	C3	3F7G	C1	5F0L	A3
1F04	A4	3F15	C3	3F7H	C1	5F0M	A3
1F05	C3	3F16	C3	3F7J	A3	5F10	A4
1F13	C4	3F18	A4	3F7K	A3	5F11	A4
1F50	A4	3F19	A4	3F7L	A3	5F12	A4
1F51	A3	3F1W	A4	3F7M	A3	5F13	C3
1F52	A1	3F20	A4	3F7N	A3	5F14	C3
1M09	C4	3F22	A4	3F7P	A3	5F15	C3
1M12	C3	3F23	A4	3F7Q	A3	5F16	C3
1M59	C3	3F24	A4	3F7R	A3	5F17	C3
1M90	C4	3F25	A2	3F80	C1	5F20	C3
2F15	C1	3F26	C2	3F82	C1	5F30	C1
2F22	C4	3F27	A2	3F84	C1	5F49	C1
2F23	C4	3F28	A2	3F85	C1	5F50	C1
2F24	C1	3F29	A2	3F86	C1	5F52	C3
2F29	C2	3F2A	A2	3F87	B2	5F59	A2
2F2B	A4	3F2B	A2	3F88	B2	5F60	A3
2F2C	A4	3F2C	A2	3F89	B2	5F61	A3
2F2D	A4	3F2D	A4	3F8A	A2	5F62	A3
2F2E	A2	3F2F	A2	3F8B	A2	5F63	A3
2F2F	A2	3F2S	A2	3F8C	A2	5F64	A3
2F2G	A2	3F2T	A2	3F8D	A2	5F65	A3
2F2H	A2	3F44	C2	3F8E	A2	5F66	A3
2F2I	A3	3F45	C3	3F8F	A2	5F67	A3
2F2K	A2	3F48	A4	3F8G	A2	5F68	A3
2F2L	A2	3F4A	A1	3F8H	A2	5F69	A3
2F30	C3	3F4F	B1	3F8J	A2	5F70	A3
2F34	A4	3F4G	A2	3F8K	A2	5F71	A3
2F35	A4	3F4H	A1	3F8L	A2	5F72	A3
2F45	C2	3F4J	A1	3F8M	A2	5F78	A2
2F46	A4	3F4K	A1	3F8N	A2	5F79	A2
2F54	C4	3F4L	A1	3F8P	A2	5F80	C2
2F57	C1	3F4M	A1	3F8Q	A2	5U00	B4
2F59	C1	3F4N	A1	3F8R	A2	5U01	C4
2F5P	A1	3F4P	A1	3F8S	A2	5U02	B4
2F5Z	B1	3F4Q	A1	3F8T	A2	6F02	A4
2F68	C1	3F4R	A1	3F8U	A2	6F04	A3
2F76	A1	3F4S	A1	3F8V	A3	6F05	A4
2F95	A4	3F4T	A1	3F8W	A2	6F07	A4
2FD1	C2	3F4U	A1	3F8Y	A3	6F09	A4
2FD2	C2	3F4V	A1	3F8Z	A3	6F10	A4
2FHL	C4	3F4W	A1	3F90	B2	6F62	C1
2FJ7	C1	3F4Y	A1	3F91	B2	7F01	C4
2FJJ	C3	3F4Z	A1	3F92	A2	7F05	A4
2FJK	C3	3F50	A2	3F93	A2	7F07	A4
2FJL	C3	3F51	A2	3F94	A2	7F10	A4
2FLG	C1	3F52	A2	3F95	A2	7F18	A2
2FLH	C1	3F53	A2	3F96	B2	7F30	C3
2FLJ	C1	3F54	A2	3F97	B2	7F31	C3
2FLK	C1	3F55	A2	3F98	B2	7F60	C1
2FLL	C1	3F56	A2	3F99	C1	7F61	C1
2U01	B4	3F57	A2	3F9A	C1	7F62	C1
2U02	C4	3F58	A2	3F9B	B1	7F65	B2
2U03	B4	3F59	A2	3F9J	C1	7F85	C2
2U06	B4	3F5A	A1	3F9K	C1	7F86	C3
2U09	C4	3F5B	B2	3F9N	A3	7U01	B4
2U10	B4	3F5C	B1	3F9P	A3	7U03	B4
2U12	B4	3F5D	B1	3F9Q	A3	9F16	C3
2U13	C4	3F5E	B1	3F9R	A3	9F24	A2
2U14	B4	3F5F	B1	3F9S	A3	9F26	C3
2U16	C4	3F5G	B1	3F9T	A3	9F27	C2
2U21	B4	3F5H	B1	3F9U	A3	9F28	C3
2U22	B4	3F5J	B1	3F9V	A3	9F29	C3
2U25	C4	3F5K	B1	3F9W	A3	9F2F	A4
2U32	B4	3F5L	B1	3F9Y	A3	9F2G	A4
2U35	B4	3F5M	B1	3F9Z	A3	9F2H	A4
2U38	A4	3F5N	B1	3FA9	C2	9F2I	A4
2U41	B4	3F5P	B1	3FH0	C2	9F2R	A2
2V34	B3	3F5Q	B1	3FH1	C2	9F2S	A2
3CA0	B3	3F5R	B1	3FH4	A4	9F2T	A2
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3CA2	B3	3F5T	B1	3FH7	B2	9F2V	A4
3CA3	B3	3F5U	A2	3FH8	B2	9F30	C3
3CA4	B3	3F5V	A2	3FH9	B2	9F31	C3
3CA5	B3	3F5W	A2	3FHI	B2	9F36	C1
3CA6	B3	3F5Y	A2	3FHJ	A2	9F37	C1
3CA7	B3	3F5Z	A2	3FHK	A2	9F52	C4
3CA8	B3	3F60	A2	3FHL	A2	9F53	C4
3CA9	B3	3F61	A2	3FHM	A2	9F54	C4
3CB0	B3	3F62	A2	3FHN	A2	9F55	B1
3CB1	B3	3F63	A2	3FHP	A2		
3CB2	B3	3F64	A2	3FHR	A2		
3CB3	B3	3F65	A2	3FHS	A2		
3CB4	B3	3F66	A2	3FHV	C2		
3CB5	B3	3F67	A2	3FHY	C2		
3CB6	B3	3F68	A2	3FKV	B1		
3CB7	B3	3F69	A2	3FKWB	1		
3CB8	A3	3F6A	A2	3FKY	B1		
3CB9	A3	3F6B	A2	3FKZ	B1		
3CC0	A3	3F6C	A2	3U08	C4		
3CC1	A3	3F6D	B1	3U11	C4		
3CC2	A3	3F6K	C1	3U17	C4		
3CC3	A3	3F6L	C1	3U27	C4		
3CC4	A3	3F6M	C1	5F00	A1		
3CC5	A3	3F6Q	B1	5F01	A1		
3CC6	A3	3F6R	B1	5F02	A2		
3CC7	A3	3F6S	C1	5F03	A2		
3CC8	A3	3F6T	C1	5F04	A2		
3CC9	A3	3F6U	C1	5F05	A2		
3CD0	A3	3F6V	C1	5F06	A1		
3CD1	A3	3F6W	C1	5F07	A1		
3CD2	A3	3F6Z	B1	5F08	A1		
3CD3	A3	3F70	A2	5F09	A1		
3CD4	A3	3F71	A2	5F0A	A1		
3CD5	A3	3F78	C1	5F0B	A1		
3CE1	A3	3F79	C1	5F0I	A4		

Layout DFI Panel (Bottom Side)



1U01	C1	2F5G	B4	2FJA	A3	3F43	C3	5F33	C3	2F1T	A2	2FD3	C2	2V52	B1
1U02	C1	2F5H	B4	2FJB	B3	3F46	C3	5F34	B3	2F20	B3	2FD4	C3	2V53	B2
2CBC	B2	2F5J	B4	2FJC	A3	3F47	C3	5F51	B2	2F21	A1	2FGA	B3	2V54	B2
2CBD	B2	2F5K	B4	2FJD	A3	3F49	B3	5F53	B2	2F25	B3	2FGB	B3	2V55	A2
2CBH	A2	2F5L	B4	2FJE	A2	3F4B	A4	5F54	B2	2F26	C3	2FGC	B2	3CD6	A2
2CBK	A2	2F5M	B3	2FJF	A3	3F4C	A4	5F55	B2	2F27	C3	2FGD	B3	3CD7	A2
2F00	A4	2F5N	B4	2FJM	C4	3F4D	B3	5F57	B3	2F28	C3	2FGE	A2	3CD8	B3
2F01	A4	2F5Q	A4	2FJN	C4	3F4E	B3	5F58	A2	2F2A	A1	2FGF	B3	3CD9	B2
2F02	A4	2F5R	A4	2FJP	B3	3F6J	C3	5U04	C1	2F2P	A1	2FGG	B3	3F00	B3
2F03	A4	2F5S	A4	2FLC	B3	3F72	A3	5U05	C1	2F2Q	A1	2FGH	B3	3F03	C3
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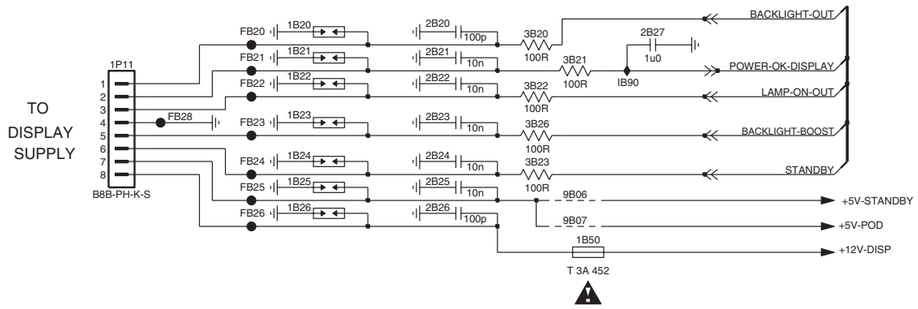


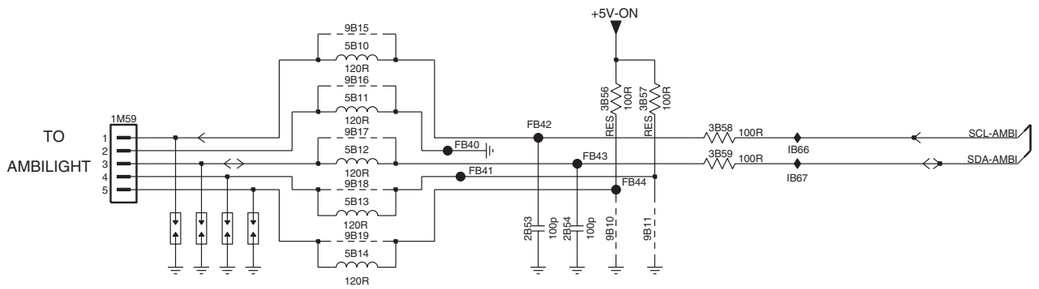
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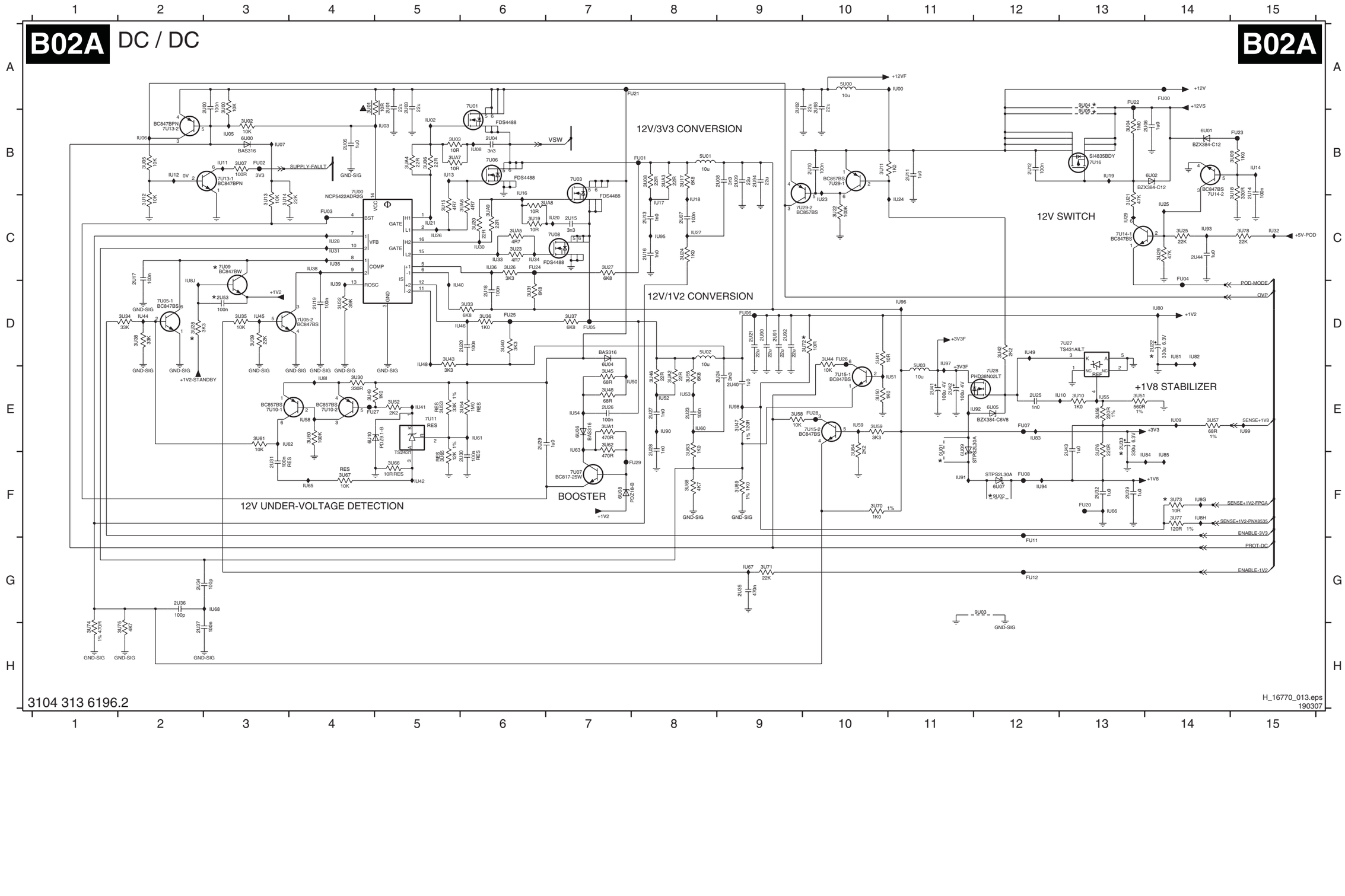


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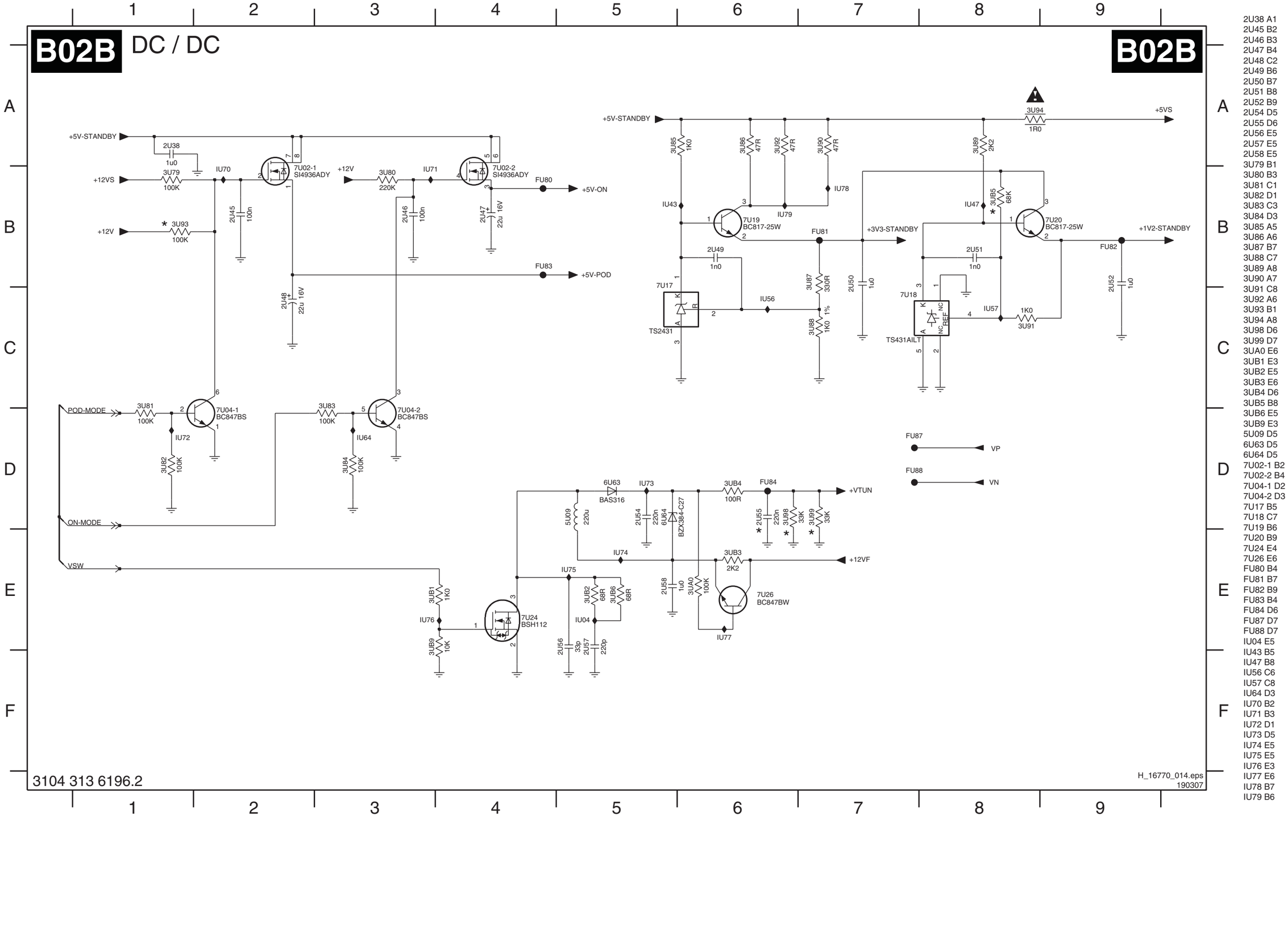
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SSB: DC / DC

B02B DC / DC

B02B



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B02C DC / DC

B02C

PNX 5050 SUPPLY

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3U7E D5
3U7F D1
3U7G E5
3U7H E4
3U7J E5
3U7L E7
3U7N F2
3U7P F3
3U7Q E5
3U8A E10
3U8B E9
3U8C E10
3U8D F9
3U8E F8
3U8F F8
3U8G F8
3U95 D4
3U96 C7
3U97 D4
5U60 C5
5U61 B6
5U62 D6
5U63 D6
5U67 B6
5U68 B6
6U60 B4
6U62 B3
6U8A F10
6U8B F11
7U61-1 C5
7U61-2 D5
7U64 C2
7U66-1 D2
7U66-2 F4
7U8A-1 E10
7U8A-2 E9
7U8B E9
7U8C E10
9U60 E4
9U8A F11
FU60 D2
FU61 C5
FU65 D7

SSB: Channel Decoder

B03A CHANNEL DECODER

B03A

FOR FACTORY USE ONLY

DTV RECEIVER

DTV RECEIVER SUPPLY

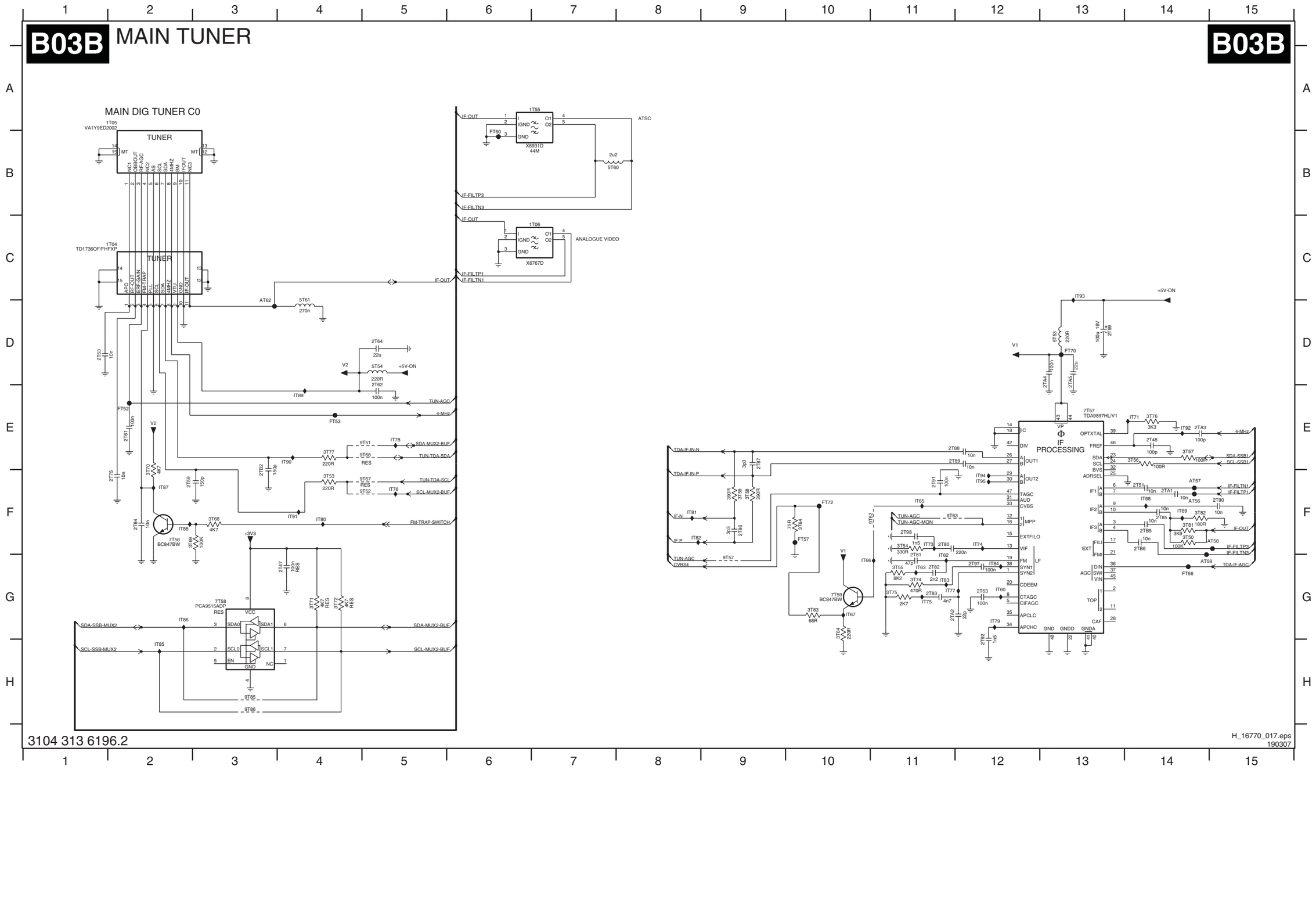
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1HE0 A10
1T69 B1
2T03 B1
2T04 B1
2T05 G7
2T06 E4
2T07 F5
2T08 G7
2T09 F10
2T10 F10
2T11 F10
2T12 G6
2T13 G6
2T14 G5
2T15 G4
2T16 G4
2T17 G4
2T18 G4
2T19 G3
2T20 G3
2T21 G3
2T22 G3
2T23 G2
2T24 G2
2T25 G2
2T26 G2
2T27 B2
2T28 C2
2T29 D4
2T30 G7
2T31 D6
2T32 E9
2T33 D10
2T34 E11
2T35 B9
2T36 B8
2T37 B9
3T01 C3
3T03 C3
3T05 E4
3T07 B2
3T08 B2
3T09 D4
3T10 C5
3T11 B5
3T12 C1
3T13 B1
3T14 C5
3T15 D6
3T16 D6
3T17 D6
3T18 B9
3T19 D5
3T20 B8
3T21 C8
3T22 E6
3T23 E6
3T24 E6
3T25 B8
3T29 D4
3T30 B6
3T31 B5
3T32 B6
3T33 D9
3T34 D8
3T35 D9
3T36 D8
3T37 C6
3T38 C6
3T40 D6
3T41 D6
3T42 D6
3T43 D6
3T44 D6
3T45 E6
3T46 E6
3T47 E6
3T48 C10
3T78 A12
3T79 A12
3T80 A11
3T86 E11
3T87 E11
3T88 E10
3T89 E10
3T90 E5
3T91 E3
3T92 F5
3T93 F4
3T94 F4
3T95 A12
5T02 F9
5T09 B2
5T31 G8
5T32 G9
7T06-1 F5
7T06-2 E4
7T18-1 B7
7T18-2 G8
7T19-1 E11
7T19-2 D11
7T20 D9
9T06 E4
9T10 D3
9T11 D3
9T12 D4
9T13 D4
9T14 D12
9T15 C4
9T16 C4
9T60 B10
FHE0 A10
FHE1 A10
FHE2 A10
FHE3 A10
FHE4 B10
FHE5 B10
FHE6 B10
FHE7 B10
FHE8 B10
FHE9 B10
FT00 D10
FT03 C4
FT04 G3
FT05 G4
FT06 C6
FT07 C6
FT08 C6
FT09 C6
IT02 G5
IT03 G5
IT04 G5
IT05 D6
IT06 D6
IT07 D6
IT08 G5
IT09 E5
IT10 F4
IT11 E3
IT12 E4
IT15 C3
IT16 D3
IT17 F4
IT26 C6
IT27 C6
IT28 C6
IT29 C6
IT30 B6
IT31 B6
IT32 B2
IT33 C2
IT34 B2
IT35 B2
IT36 B1
IT37 D4
IT38 D4
IT39 D4
IT40 D4
IT45 E11
IT46 E10
IT47 D11
ITA1 C8
ITA2 C8
ITA3 D8
ITA4 D8
ITA5 D8
ITA6 D8
ITA7 G7
ITA8 G7
ITA9 F10

SSB: Main Tuner

1T04 C2 2T47 G4 2T59 F2 2T64 D5 2T82 G11 2T86 F9 2T90 F15 2T98 F11 2TA3 E14 2TB5 F14 3T54 F11 3T58 F9 3T69 F2 3T74 G11 3T81 F14 5T53 D13 7T56 F2 9T51 E5 9T63 F11 9T86 H3 AT59 G14 FT56 G14 FT72 F10 IT65 F11 IT69 F14 IT75 G11 IT79 G12 IT83 G11 IT87 F2 IT91 F4 IT95 F12
1T05 A2 2T48 E14 2T61 E2 2T75 F2 2T83 G11 2T87 E9 2T91 F11 2T99 D13 2TA4 D13 2TB6 F14 3T55 G11 3T59 F9 3T70 F2 3T75 G11 3T82 F14 5T54 D5 7T57 E13 9T52 F5 9T67 F5 AT56 F14 AT62 D3 FT57 F10 IT60 G12 IT66 G10 IT71 E14 IT76 F5 IT80 F4 IT84 G12 IT88 F2 IT92 E14
1T06 C7 2T51 F14 2T62 E5 2T80 F11 2T84 F2 2T88 E11 2T92 H12 2TA1 F14 2TA5 D13 3T50 F14 3T56 E14 3T64 F10 3T71 G4 3T76 E14 3T83 G10 5T60 B7 7T58 G3 9T57 G9 9T68 E5 AT57 F14 FT52 E2 FT60 B6 IT62 G11 IT67 G10 IT73 F11 IT77 G11 IT81 F8 IT85 H2 IT89 E4 IT93 C13
1T55 A7 2T53 D1 2T63 G12 2T81 G11 2T85 F14 2T89 E11 2T97 G12 2TA2 G11 2TB2 F3 3T53 F4 3T57 E14 3T68 F3 3T72 G4 3T77 E4 3T84 G10 5T61 D4 7T59 G10 9T62 F11 9T85 H3 AT58 F15 FT53 E4 FT70 D13 IT63 G11 IT68 F14 IT74 F12 IT78 E5 IT82 F8 IT86 G2 IT90 E4 IT94 F12



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SSB: SSB: PNX 85xx: Standby Controller

B04A PNX 85xx: STANDBY CONTROLLER

B04A

STANDBY CONTROL

7H00-6 PNX85xx

+3V3-STANDBY

RESET-STBY-J

SENSE+1V2-PNX8535

SENSE+1V4

DETECT-1V2-2V5-3V3

DETECT-5V-12V

SCL-UP-MIPS

SDA-UP-MIPS

SPI-SDI

SPI-SDO

SPI-CLK

SPI-CSB

SPI-PROG

SPI-WP

CTRL2-STBY_BACKLIGHT-CTRL_RESET-P3

CTRL5-STBY_BACKLIGHT-BOOST

PSEN

ALE

EA

RXD-UP

TXD-UP

BOLT-ON-IO

RESET-SYS-DETECT

AV2-BLK

SDM

KEYBOARD

LIGHT-SENSOR

AV1-STATUS

AV2-STATUS

DV-B3_AUDIO-MUTE

AUDIO-RESET

AUDIO-MUTE

LED1-3V3

LED2-3V3

LED1

LED2

POWER-OK-DISPLAY

CTRL3-STBY_POWER-OK-DISP

+5V-ON

+12V

7H02 M25P05-AVMN6 512K FLASH

7H04 NCP303LSN10T1

7H90 NCP303LSN10T1

7H91 NCP303LSN10T1

7H92 NCP303LSN10T1

7H03 NCP303LSN10T1

7H14 BC847BW

7H93 BC847BW

7H16 BC847BW

7H18 BC847BW

7H22 PDTC114EU

7H21 PDTC114EU

BAS316

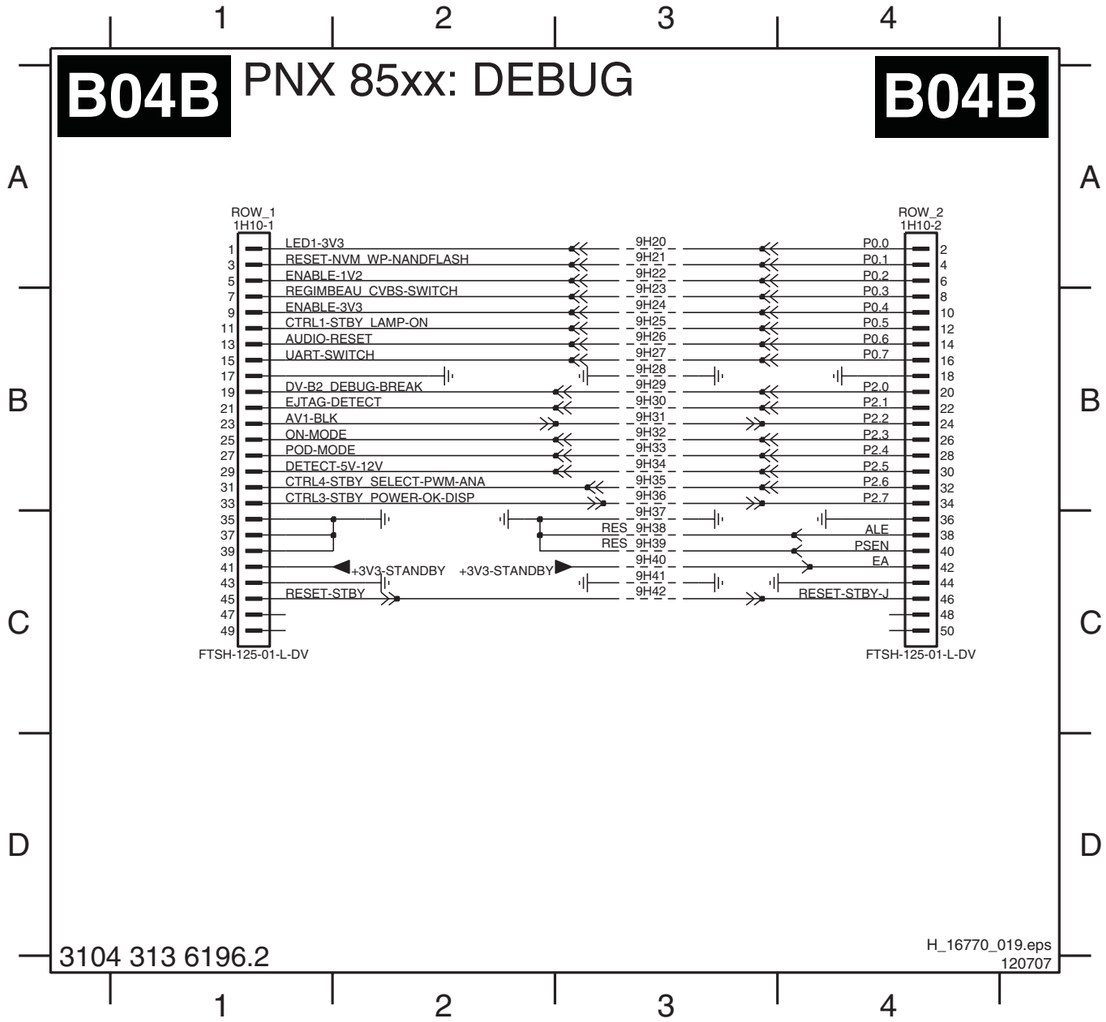
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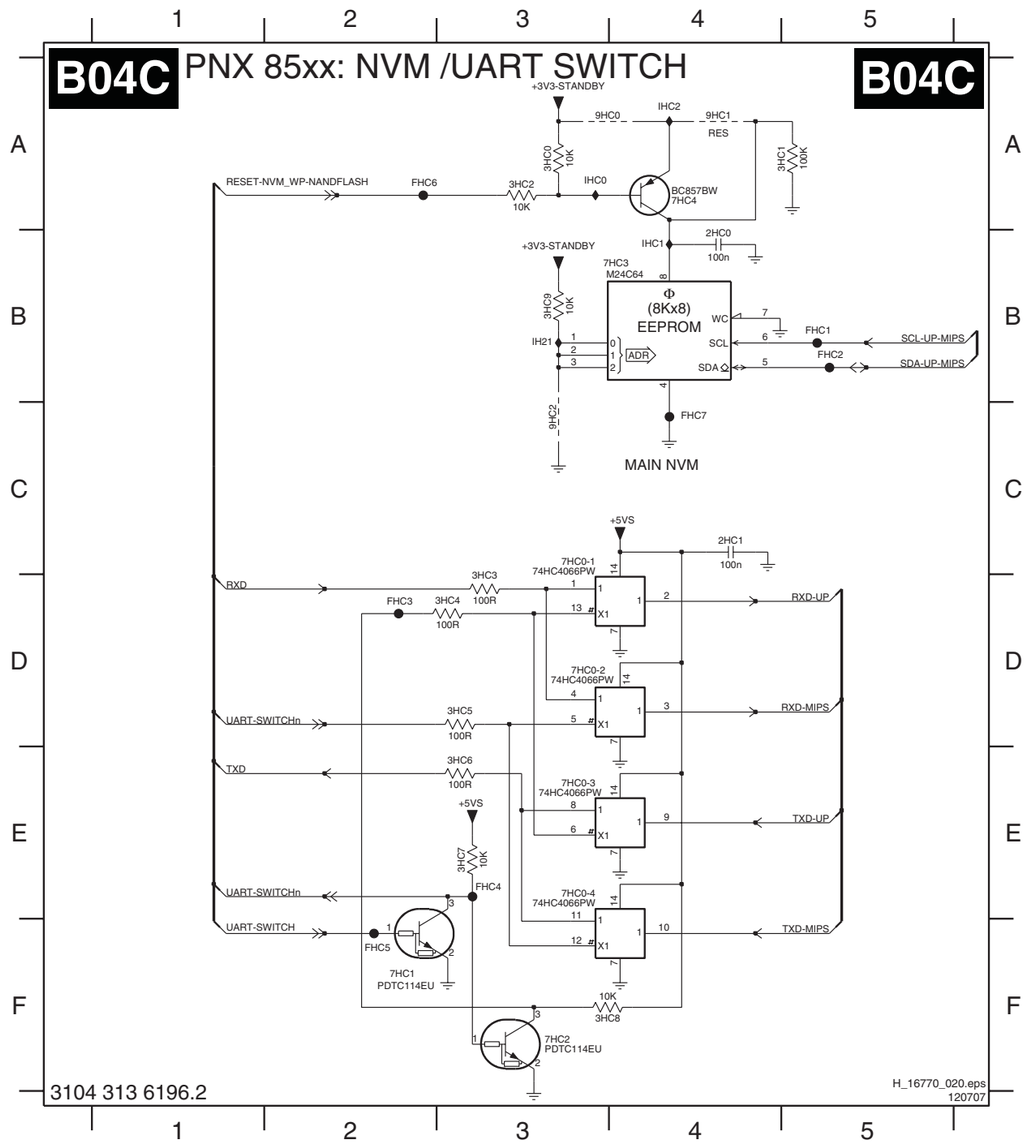
1HF0 A3 7H03 G13
2H00 B3 7H04 E4
2H01 D3 7H14 E3
2H05 G13 7H16 H10
2H06 C14 7H18 H11
2H07 C14 7H21 F13
2H08 F4 7H22 F12
2H10 C11 7H90 F4
2H11 I4 7H91 H4
2H90 G4 7H92 I4
2H91 H4 7H93 I3
2HF0 A3 9H01 C14
2HF1 A3 9H02 D14
3H00 B11 9H03 C14
3H01 B11 9H05 H8
3H02 B11 9H06 I8
3H03 B11 9H07 E13
3H04 B11 9H08 B14
3H05 B11 9H09 A9
3H06 B11 9H10 A9
3H07 B11 AHF0 A4
3H08 C11 FH00 C13
3H09 A3 FH01 C13
3H10 B2 FH02 G7
3H11 E13 FH10 A10
3H12 E13 FH11 A10
3H13 B1 FH12 A10
3H14 B2 IH00 D9
3H15 B1 IH01 D11
3H16 B2 IH02 D4
3H17 B1 IH03 D9
3H18 I2 IH04 G2
3H19 B2 IH05 G4
3H20 B1 IH06 D9
3H21 C2 IH07 D9
3H22 I2 IH08 E3
3H23 C1 IH09 H7
3H24 C2 IH10 G13
3H25 I3 IH11 G12
3H26 C1 IH12 H12
3H27 C2 IH13 H11
3H28 C1 IH14 H11
3H29 I3 IH15 H10
3H30 C2 IH16 E13
3H31 C1 IH17 E13
3H32 A11 IH18 I7
3H33 I3 IH19 G4
3H35 D4 IH20 E4
3H36 D2 IH25 G3
3H37 D4 IH26 H3
3H38 B7 IH30 I2
3H39 B2 IH31 I4
3H40 B4 IH32 I4
3H41 B7 IH90 F4
3H42 B1 IH91 H2
3H43 B4 IH92 H4
3H44 B7 IH93 H4
3H46 B2 IHSF G13
3H47 B5 IHWZ G8
3H48 C1
3H49 C4
3H50 B7
3H51 C2
3H52 C4
3H53 B7
3H54 B7
3H56 C7
3H57 B4
3H58 C2
3H59 C4
3H60 C1
3H61 C4
3H63 D5
3H64 D1
3H65 D4
3H66 D4
3H67 D2
3H68 D4
3H69 D1
3H70 D2
3H71 D4
3H72 D4
3H73 D4
3H74 D4
3H77 E2
3H78 E3
3H79 F2
3H80 G11
3H81 G12
3H82 G12
3H83 H10
3H84 G2
3H85 H11
3H86 E3
3H87 F3
3H88 H10
3H89 G3
3H90 H11
3H91 G3
3H92 F3
3H93 H11
3H94 H3
3H95 H12
3H96 H2
3H97 H3
3H98 H3
3HF1 A4
3HW0 G8
6H00 G3
6H01 G12
6H05 H3
6HW0 G8
6HW1 G8
7H00-6 A5
7H02 D10

SSB: SSB: PNX 85xx: Debug

9H20 A3 9H23 B3 9H26 B3 9H29 B3 9H32 B3 9H35 B3 9H38 C3 9H41 C3 9H44 C3
9H21 A3 9H24 B3 9H27 B3 9H30 B3 9H33 B3 9H36 B3 9H39 C3 9H42 C3
9H22 A3 9H25 B3 9H28 B3 9H31 B3 9H34 B3 9H37 C3 9H40 C3 9H43 C3



SSB: SSB: PNX 85xx: NVM / UART Switch

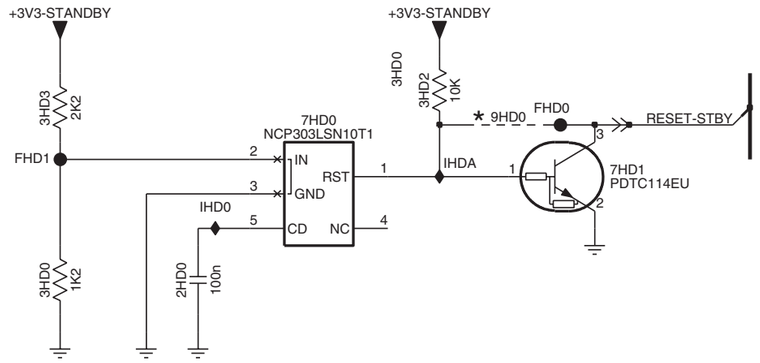


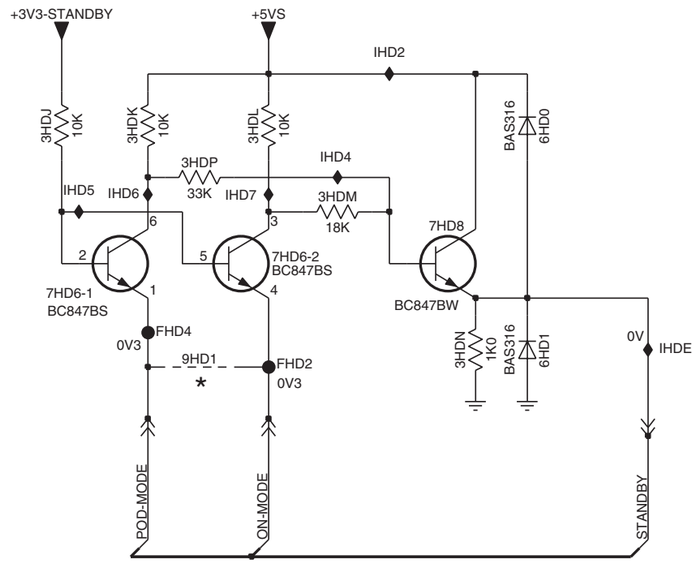
2HC0 B4
2HC1 C4
3HC0 A3
3HC1 A5
3HC2 A3
3HC3 D3
3HC4 D3
3HC5 D3
3HC6 E3
3HC7 E3
3HC8 F3
3HC9 B3
7HC0-1 C3
7HC0-2 D3
7HC0-3 E3
7HC0-4 E3
7HC1 F2
7HC2 F3
7HC3 B4
7HC4 A4
9HC0 A3
9HC1 A4
9HC2 C3
FHC1 B5
FHC2 B5
FHC3 D2
FHC4 E3
FHC5 F2
FHC6 A2
FHC7 C4
IH21 B3
IHC0 A3
IHC1 B4
IHC2 A4

SSB: SSB: PNX 85xx: Miscellaneous

B04D PNX 85xx: MISCELLANEOUS

B04D





2HD0 D2
3HD0 D2
3HD2 C3
3HD3 C2
3HDJ C5
3HDK C6
3HDL C6
3HDM C6
3HDN C7
3HDP C6
6HD0 C7
6HD1 C7
7HD0 C3
7HD1 C4
7HD6-1 C5
7HD6-2 C6
7HD8 C7
9HD0 C3
9HD1 D6
FHD0 C4
FHD1 C1
FHD2 D6
FHD4 C6
IHD0 C2
IHD2 B7
IHD4 C6
IHD5 C5
IHD6 C5
IHD7 C6
IHDA C3
IHDE C8

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SSB: SSB: PNX 85xx: Control

B04E PNX 85xx: CONTROL

B04E

7H00-4
PNX85xx
MIPS C0NTROL

EJTAG-TDI AK1 TDI
EJTAG-TCK AJ2 TCK
EJTAG-TMS AK3 TMS
EJTAG-TRSTN AJ3 TRST
EJTAG-TDO AK2 TDO
EJTAG

SCL1 AK27 SCL
SDA1 AH27 SDA
SCL2 AK29 SCL
SDA2 AK28 SDA
SCL3 AJ28 SCL
SDA3 AJ27 SDA
I2C1 I2C2 I2C3

+1V2 9HF8 AE27 VPP_ID

CA-CTRLEN_BOOTMODE IHF6 T1
CTRL1-MIPS_LCD-PWR-ON T2
IRQ-PCI T3
CA-INT 9HG1 IHF7 G27
RXD-MIPS E27
TXD-MIPS 9HG0 IHS8 D28
GPIO

2HF2 100n
3HP8 10K +3V3-PER
CA-INT
9HG2 RES
3HFY 10K +3V3-PER
CA-CTRLEN_BOOTMODE

RESET_SYS AJ26 RESET-SYS-DETECT
27MHz_OUT AK26 IHS7 3HF0 33R PCI-CLK-OUT

+3V3-PER
3HF3 10K
RESET-SYS-DETECT
6HF0 SML-310
3HF9 330R

JTAG-TD-PNX8535-FE
JTAG-TD-PNX5050-PNX8535 FHP4

PCI-CLK-OUT
3HFG 33R PCI-CLK-DEBUG
IHF0 3HFH 33R IHF5 PCI-CLK-PNX5050_CLK-MOP
3HF2 33R PCI-CLK-PNX8535
3HF4 33R PCI-CLK-USB20

RESERVED
+3V3
2HF5 10n
2HF6 100n
7HF1
CY2305S
VDD
ZERO DELAY BUFFER
REF CLK CLKOUT GND
2HF7 10p
3HFK 33R PCI-CLK-PNX8535
3HFP 33R PCI-CLK-DEBUG
2HF8 15p
3HFM 33R PCI-CLK-PNX5050_CLK-MOP
3HFN 33R PCI-CLK-USB20
PCI-CLK-OUT 3HFR 33R

SCL-SLAVE 9HP5 SCL-UP-MIPS
SDA-SLAVE 9HP6 SDA-UP-MIPS
SCL-2 9HP7 SCL-UP-MIPS
SDA-2 9HP8 SDA-UP-MIPS
SCL-SSB 9HPA SCL-SSB-MUX1
SCL-SSB 9HPB SCL-SSB-MUX2
SDA-SSB 9HPC SDA-SSB-MUX1
SDA-SSB 9HPD SDA-SSB-MUX2

3HPA 100R FHP0 IHF4
FHP1 IHF8
3HPB 100R FHP2 IHF9
1HP0 SCL SDA

+3V3-STANDBY
2HP1 100p
7HP5
PCA9540BDP
VDD SC0 SC1 SD0 SD1 SCL SDA VSS
NULL
INP FIL
I2C-BUS CTRL

SCL1 3HPD 100R SCL-SLAVE
SDA1 3HPE 100R SDA-SLAVE
SCL2 3HPF 100R SCL-2
SDA2 3HPG 100R SDA-2
SCL3 3HPH 100R SCL-SSB
SDA3 3HPJ 100R SDA-SSB
SCL-SSB
SDA-SSB

3HPK 4K7 +3V3-PER
3HPM 4K7
3HPT 100R
3HPQ 100R

+3V3-STANDBY
3HPZ 4K7 3HPC 4K7 3HPX 4K7 3HPY 4K7
3HPR 100R FHP3 SCL-SSB-MUX1
3HPW 100R IHPF SCL-SSB-MUX2
3HPS 100R FHPA SDA-SSB-MUX1
3HPU 100R FHPB SDA-SSB-MUX2

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1HP0 D4
2HF2 C1
2HF5 C7
2HF6 D7
2HF7 D8
2HF8 D8
2HP1 E4
3HF0 B5
3HF2 C7
3HF3 A6
3HF4 C7
3HF9 B6
3HFG B7
3HFH B6
3HFK D8
3HFM E8
3HFN E8
3HFP D8
3HFR D6
3HFY C2
3HP8 C1
3HPA D3
3HPB D3
3HPC E6
3HPD E1
3HPE E1
3HPF E1
3HPG E1
3HPH E1
3HPJ F1
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3HPM F3
3HPQ F3
3HPR E6
3HPS F6
3HPT F3
3HPU F6
3HPW F6
3HPX E6
3HPY E7
3HPZ E6
6HF0 A6
7H00-4 A3
7HF1 D7
7HP5 E4
9HF8 B2
9HG0 C2
9HG1 C2
9HG2 C3
9HP5 D1
9HP6 D1
9HP7 D1
9HP8 D1
9HPA D1
9HPB D1
9HPC D1
9HPD D1
FHP0 D4
FHP1 D3
FHP2 D4
FHP3 E7
FHP4 B9
FHPA F6
FHPB F6
IHF0 B6
IHF4 D4
IHF5 B7
IHF6 C3
IHF7 C3
IHF8 D4
IHF9 D4
IHPF F6
IHS7 B4
IHS8 C2

SSB: SSB: PNX 85xx: Control

B04F PNX 85xx: CONTROL

B04F

3HES C7
3HET C7
3HEU C5
3HEV B8
3HF5 B2
3HFA B7
3HFB B8
3HFC B7
3HFD B7
3HFE B7
3HFF B7
3HFZ C7
7H00-5 A3
9HF4 C7
9HF5 C7
9HF6 C7
9HF7 C7
IHF1 B2
IHF2 B2
IHF3 B2

7H00-5
PNX85xx

PCI XIO

XIO-ACK — A11 ACK
XIO-AD25 — B10 AD25 | XIO
XIO-SEL-NAND — 3HF5 100R — B11 | IHF1 C11 | IHF2 D11 | IHF3 E11 | XIO SEL

PCI-AD0 A20 … PCI-AD31 E12 | PCI AD

CBE[0..3] — D12 C12 B12 A12 — PCI-CBE0 PCI-CBE1 PCI-CBE2 PCI-CBE3
PCI_CLK — A21 — PCI-CLK-PNX8535
PCI CTRL: DEVSEL A16, FRAME C17, IRDY D17, TRDY E17, STOP B16, IDSEL B21, PAR E16, PERR C16, SERR D16
PCI-DEVSEL, PCI-FRAME, PCI-IRDY, PCI-TRDY, PCI-STOP, PCI-PAR, PCI-PERR, PCI-SERR
3HEU 100R — PCI-AD24
REQ D21, GNT E21, REQ_B E22, GNT_B E20 — PCI-REQ, PCI-GNT, PCI-REQ-B, PCI-GNT-B
INTA_OUT C21 — PCI-INTA-OUT

PCI-DEVSEL, PCI-FRAME, PCI-IRDY, PCI-TRDY, PCI-STOP, PCI-PERR, PCI-SERR — 10K — 3HFA, 3HFB, 3HFC, 3HFD, 3HFE, 3HFF, 3HEV — +3V3-PER

PCI-REQ — 10K — 3HES — +3V3-PER — 9HF6 — PCI-REQ-
PCI-GNT — 10K — 3HET — +3V3-PER — 9HF7 — PCI-GNT-PNX8535
PCI-REQ-B — 10K — 3HFZ — +3V3-PER — 9HF4 — PCI-REQ-USB20
PCI-GNT-B — 9HF5 — PCI-GNT-USB20

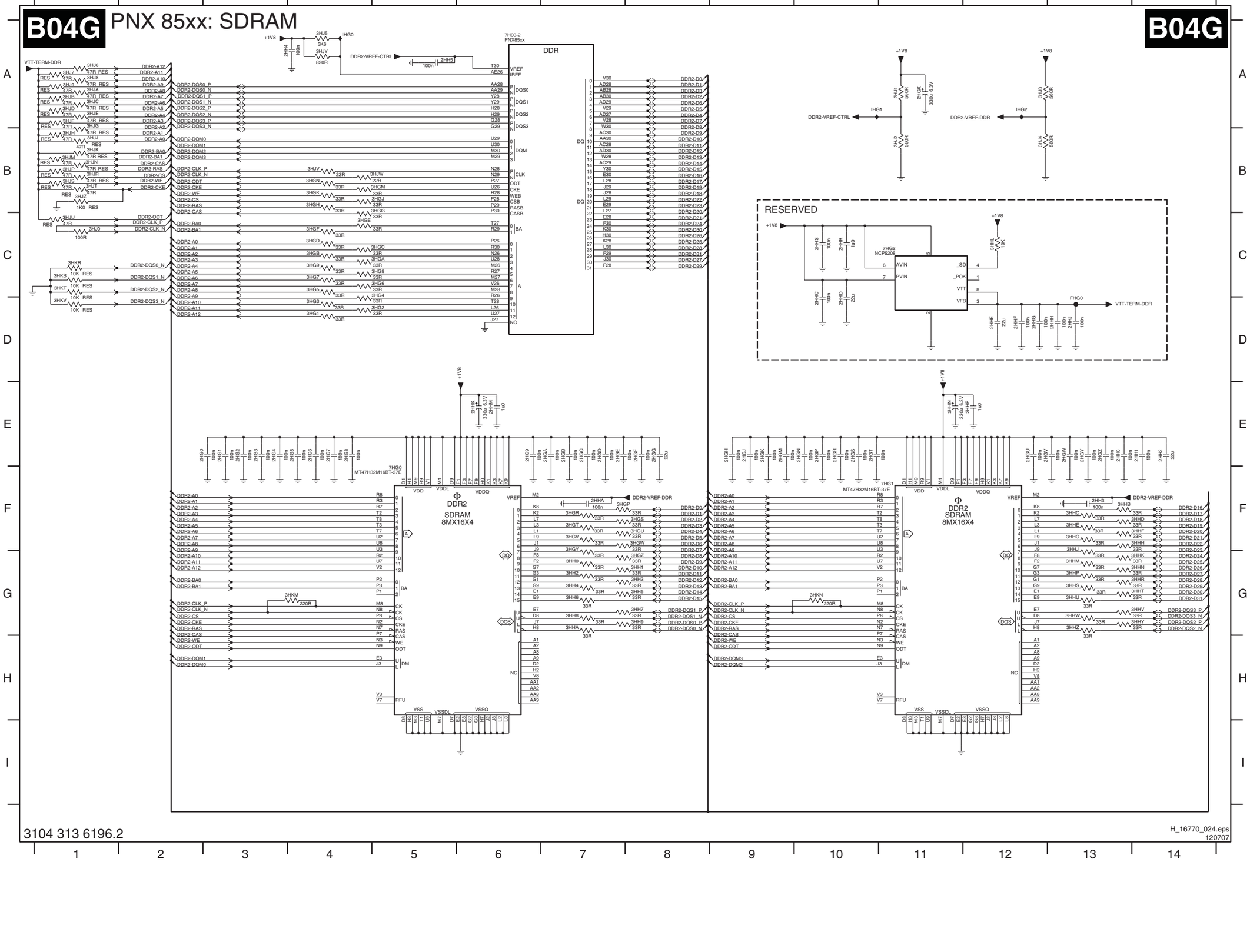
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SSB: SSB: PNX 85xx: SDRAM

B04G PNX 85xx: SDRAM

B04G

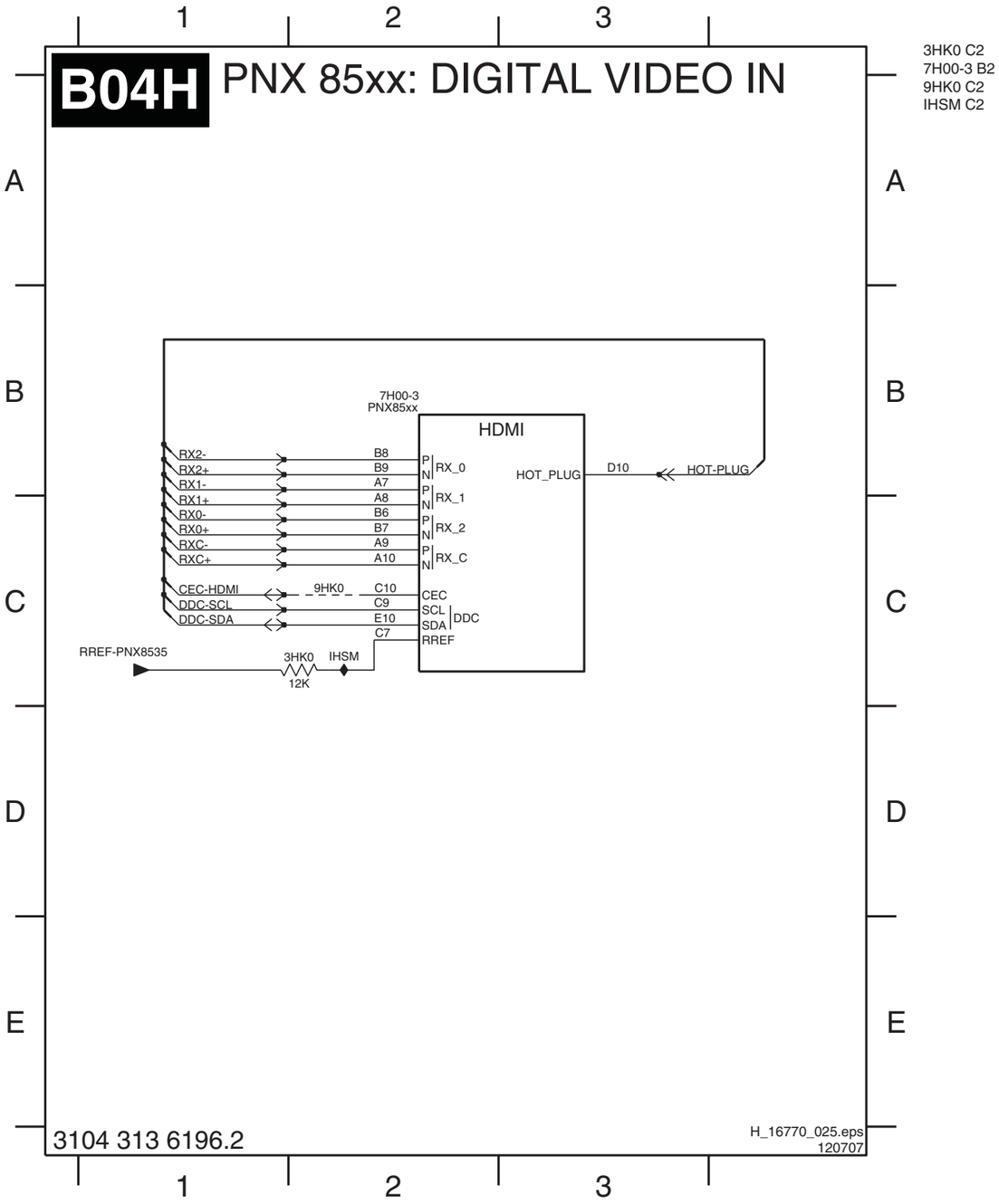


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2HG0 E3	3HJ3 A12
2HG1 E3	3HJ4 B12
2HG2 E3	3HJ5 A4
2HG3 E3	3HJ6 A1
2HG4 E3	3HJ7 A1
2HG5 E4	3HJ8 A1
2HG6 E4	3HJ9 A1
2HG7 E4	3HJA A1
2HG8 E4	3HJB A1
2HG9 E6	3HJC A1
2HGA E7	3HJD A1
2HGB E7	3HJE A1
2HGC E7	3HJF A1
2HGD E7	3HJG A1
2HGE E7	3HJH B1
2HGF E8	3HJJ B1
2HGG E8	3HJK B1
2HGH E9	3HJM B1
2HGJ E9	3HJN B1
2HGK E9	3HJP B1
2HGM E9	3HJR B1
2HGN E10	3HJS B1
2HGP E10	3HJT B1
2HGR E10	3HJU C1
2HGS E10	3HJV B4
2HGT E10	3HJW B5
2HGU E12	3HJY A4
2HGV E13	3HJZ B1
2HGW E13	3HKM G4
2HGX A11	3HKN G10
2HGY E13	3HKR C1
2HGZ E13	3HKS C1
2HH0 E13	3HKT C1
2HH1 E14	3HKV D1
2HH2 E14	7H00-2 A6
2HH3 F13	7HG0 F5
2HH4 A4	7HG1 F11
2HH5 A5	7HG2 C11
2HHA F7	FHG0 D13
2HHC D10	IHG0 A4
2HHD D10	IHG1 A10
2HHE D12	IHG2 A12
2HHF D12	
2HHG D12	
2HHH D13	
2HHJ D13	
2HHK E6	
2HHM E6	
2HHN E11	
2HHP E12	
2HHR C10	
2HHS C10	
3HG1 D4	
3HG2 D5	
3HG3 D4	
3HG4 D5	
3HG5 C4	
3HG6 C5	
3HG7 C4	
3HG8 C5	
3HG9 C4	
3HGA C5	
3HGB C4	
3HGC C5	
3HGD C4	
3HGE C4	
3HGF C4	
3HGG C5	
3HGH B4	
3HGJ B5	
3HGK B4	
3HGM B5	
3HGN B4	
3HGP F7	
3HGR F7	
3HGS F8	
3HGT F7	
3HGU F8	
3HGV F7	
3HGW F8	
3HGY G7	
3HGZ G8	
3HH0 G7	
3HH1 G8	
3HH2 G7	
3HH3 G8	
3HH4 G7	
3HH5 G8	
3HH6 G7	
3HH7 G8	
3HH8 G7	
3HH9 G8	
3HHA G7	
3HHB F13	
3HHC F13	
3HHD F14	
3HHE F13	
3HHF F14	
3HHG F13	
3HHH F14	
3HHJ G13	
3HHK G14	
3HHL C12	
3HHM G13	
3HHN G14	
3HHP G13	
3HHR G14	
3HHS G13	
3HHT G14	
3HHU G13	
3HHV G14	
3HHW G13	
3HHY G14	
3HHZ G13	
3HJ0 C1	
3HJ1 A11	
3HJ2 B11	

SSB: PNX 85xx: Digital Video In

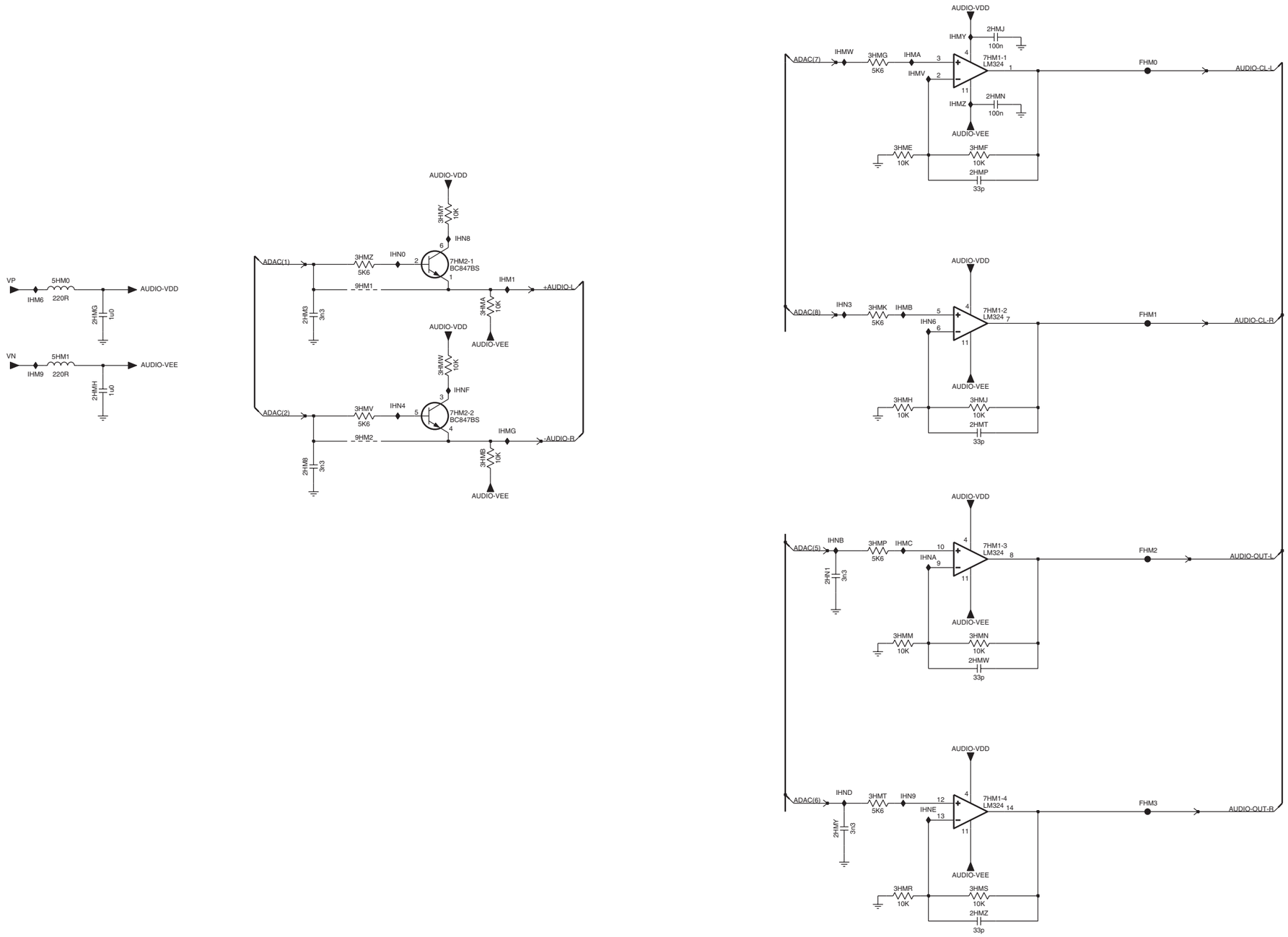


Personal Notes:

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SSB: PNX 85xx: Audio

B04I PNX 85xx: AUDIO **B04I**



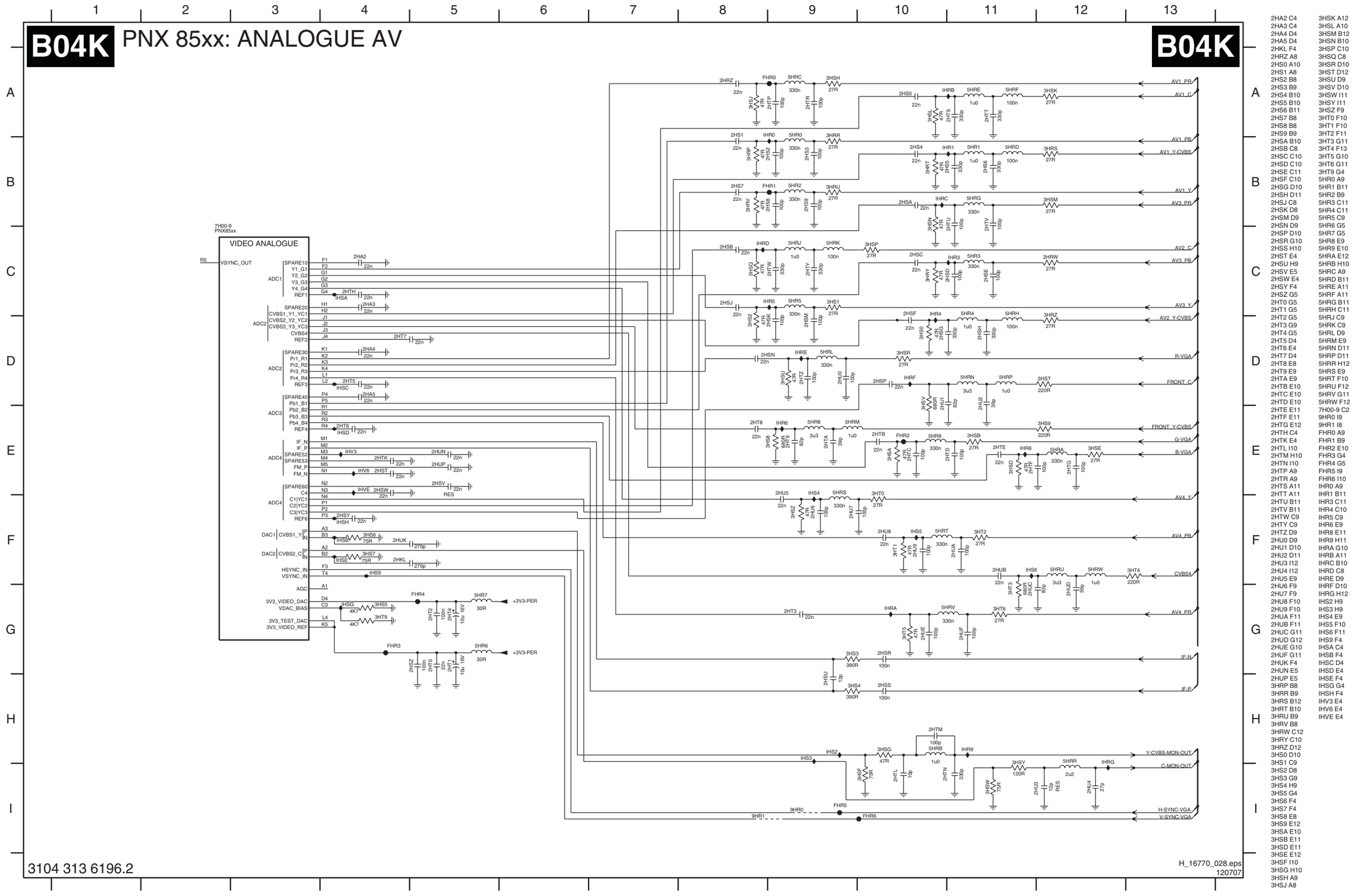
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2HMH D2
2HMJ A10
2HMN B10
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2HMY H8
2HMZ I9
2HN1 F8
3HMA D5
3HMB E5
3HME B9
3HMF B9
3HMG B9
3HMH E9
3HMJ E9
3HMK D9
3HMM G9
3HMN G9
3HMP F9
3HMR I9
3HMS I9
3HMT H9
3HMV E4
3HMW D5
3HMY C5
3HMZ C4
5HM0 C2
5HM1 D2
7HM1-1 B9
7HM1-2 D9
7HM1-3 F9
7HM1-4 H9
7HM2-1 C5
7HM2-2 E5
9HM1 D4
9HM2 E4
FHM0 B11
FHM1 D11
FHM2 F11
FHM3 H11
IHM1 C5
IHM6 D1
IHM9 D1
IHMA B9
IHMB D9
IHMC F9
IHMG E5
IHMV B9
IHMW B8
IHMY A9
IHMZ B9
IHN0 C5
IHN3 D8
IHN4 E5
IHN6 D9
IHN8 C5
IHN9 H9
IHNA F9
IHNB F8
IHND H8
IHNE H9
IHNF D5

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SSB: PNX 85xx: Analogue AV

B04K PNX 85xx: ANALOGUE AV



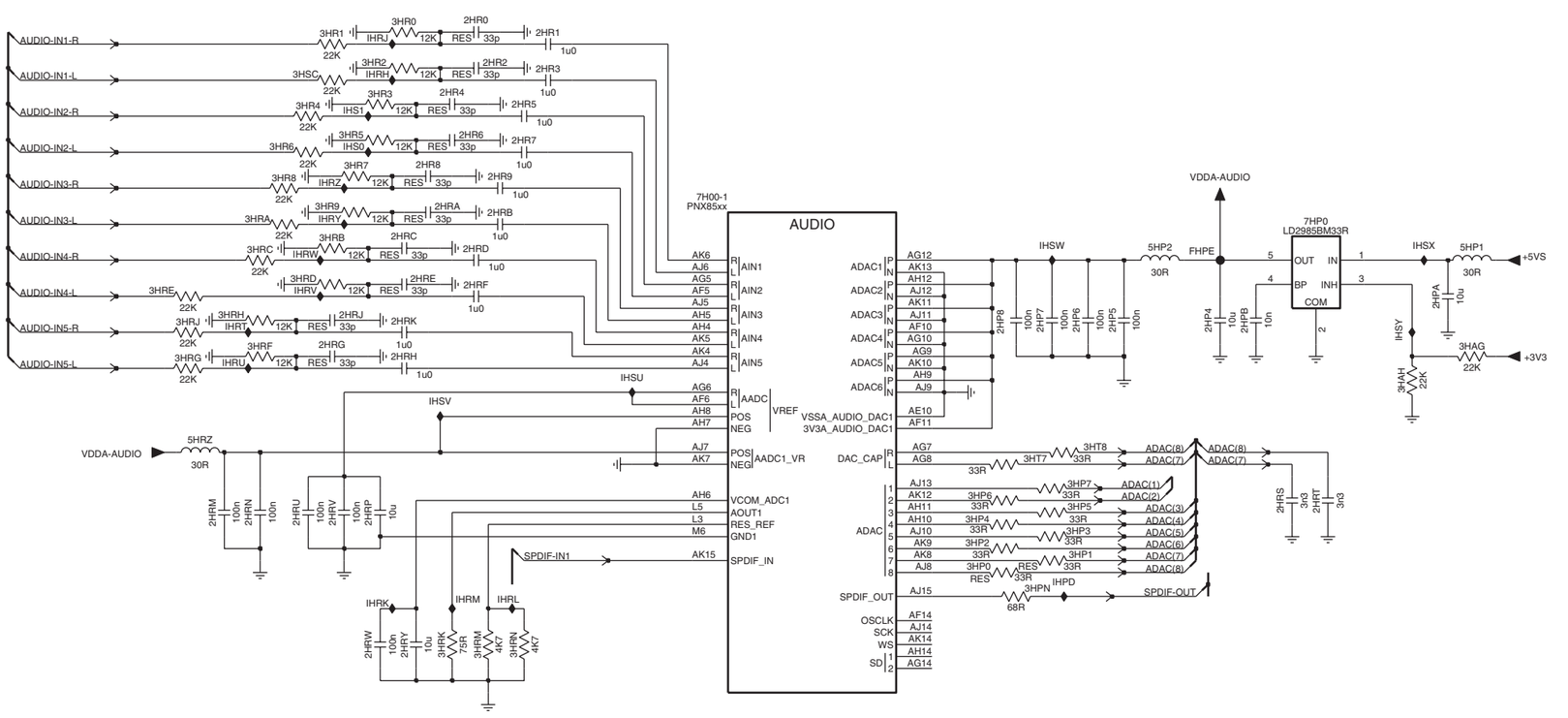
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2HA4 D4	3HSM B12	2HU2 D11	IHR3 C11
2HA5 D4	3HSN B10	2HU3 I12	IHR4 C10
2HKL F4	3HSP C10	2HU4 I12	IHR5 C9
2HRZ A8	3HSQ C8	2HU5 E9	IHR6 E9
2HS0 A10	3HSR D10	2HU6 F9	IHR8 E11
2HS1 A8	3HST D12	2HU7 F9	IHR9 H11
2HS2 B8	3HSU D9	2HU8 F10	IHRA G10
2HS3 B9	3HSV D10	2HU9 F10	IHRB A11
2HS4 B10	3HSW I11	2HUA F11	IHRC B10
2HS5 B10	3HSY I11	2HUB F11	IHRD C8
2HS6 B11	3HSZ F9	2HUC G11	IHRE D9
2HS7 B8	3HT0 F10	2HUD G12	IHRF D10
2HS8 B8	3HT1 F10	2HUE G10	IHRG H12
2HS9 B9	3HT2 F11	2HUF G11	IHS2 H9
2HSA B10	3HT3 G11	2HUK F4	IHS3 H9
2HSB C8	3HT4 F13	2HUN E5	IHS4 E9
2HSC C10	3HT5 G10	2HUP E5	IHS5 F10
2HSD C10	3HT6 G11	3HRP B8	IHS6 F11
2HSE C11	3HT9 G4	3HRR B9	IHS9 F4
2HSF C10	5HR0 A9	3HRS B12	IHSA C4
2HSG D10	5HR1 B11	3HRT B10	IHSB F4
2HSH D11	5HR2 B9	3HRU B9	IHSC D4
2HSJ C8	5HR3 C11	3HRV B8	IHSD E4
2HSK D8	5HR4 C11	3HRW C12	IHSE F4
2HSM D9	5HR5 C9	3HRY C10	IHSG G4
2HSN D9	5HR6 G5	3HRZ D12	IHSH F4
2HSP D10	5HR7 G5	3HS0 D10	IHV3 E4
2HSR G10	5HR8 E9	3HS1 C9	IHV6 E4
2HSS H10	5HR9 E10	3HS2 D8	IHVE E4
2HST E4	5HRA E12	3HS3 G9	
2HSU H9	5HRB H10	3HS4 H9	
2HSV E5	5HRC A9	3HS5 G4	
2HSW E4	5HRD B11	3HS6 F4	
2HSY F4	5HRE A11	3HS7 F4	
2HT0 G5	5HRF A11	3HS8 E8	
2HT1 G5	5HRG B11	3HS9 E12	
2HT2 G5	5HRH C11	3HSA E10	
2HT3 G9	5HRJ C9	3HSB E11	
2HT4 G5	5HRK C9	3HSD E11	
2HT5 D4	5HRL D9	3HSE E12	
2HT6 E4	5HRM E9	3HSF I10	
2HT7 D4	5HRN D11	3HSG H10	
2HT8 E8	5HRP D11	3HSH A9	
2HT9 E9	5HRR H12	3HSJ A8	
2HTA E9	5HRS E9		
2HTB E10	5HRT F10		
2HTC E10	5HRU F12		
2HTD E10	5HRV G11		
2HTE E11	5HRW F12		
2HTF E11	7H00-9 C2		
2HTG E12	9HR0 I9		
2HTH C4	9HR1 I8		
2HTK E4	FHR0 A9		
2HTL I10	FHR1 B9		
2HTM H10	FHR2 E10		
2HTN I10	FHR3 G4		
2HTP A9	FHR4 G5		
2HTR A9	FHR5 I9		
2HTS A11	FHR6 I10		
2HTT A11	IHR0 A9		
2HTU B11	IHR1 B11		
2HTV B11	IHR3 C11		
2HTW C9	IHR4 C10		
2HTY C9	IHR5 C9		
2HTZ D9	IHR6 E9		
2HU0 D9	IHR8 E11		
2HU1 D10	IHR9 H11		
2HU2 D11	IHRA G10		
2HU3 I12	IHRB A11		
2HU4 I12	IHRC B10		
2HU5 E9	IHRD C8		
2HU6 F9	IHRE D9		
2HU7 F9	IHRF D10		
2HU8 F10	IHRG H12		
2HU9 F10	IHS2 H9		
2HUA F11	IHS3 H9		
2HUB F11	IHS4 E9		
2HUC G11	IHS5 F10		
2HUD G12	IHS6 F11		
2HUE G10	IHS9 F4		
2HUF G11	IHSA C4		
2HUK F4	IHSB F4		
2HUN E5	IHSC D4		
2HUP E5	IHSD E4		
3HRP B8	IHSE F4		
3HRR B9	IHSG G4		
3HRS B12	IHSH F4		
3HRT B10	IHV3 E4		
3HRU B9	IHV6 E4		
3HRV B8	IHVE E4		
3HRW C12			
3HRY C10			
3HRZ D12			
3HS0 D10			
3HS1 C9			
3HS2 D8			
3HS3 G9			
3HS4 H9			
3HS5 G4			
3HS6 F4			
3HS7 F4			
3HS8 E8			
3HS9 E12			
3HSA E10			
3HSB E11			
3HSD E11			
3HSE E12			
3HSF I10			
3HSG H10			
3HSH A9			
3HSJ A8			

SSB: PNX 85xx: Audio

B04L PNX 85xx: AUDIO **B04L**



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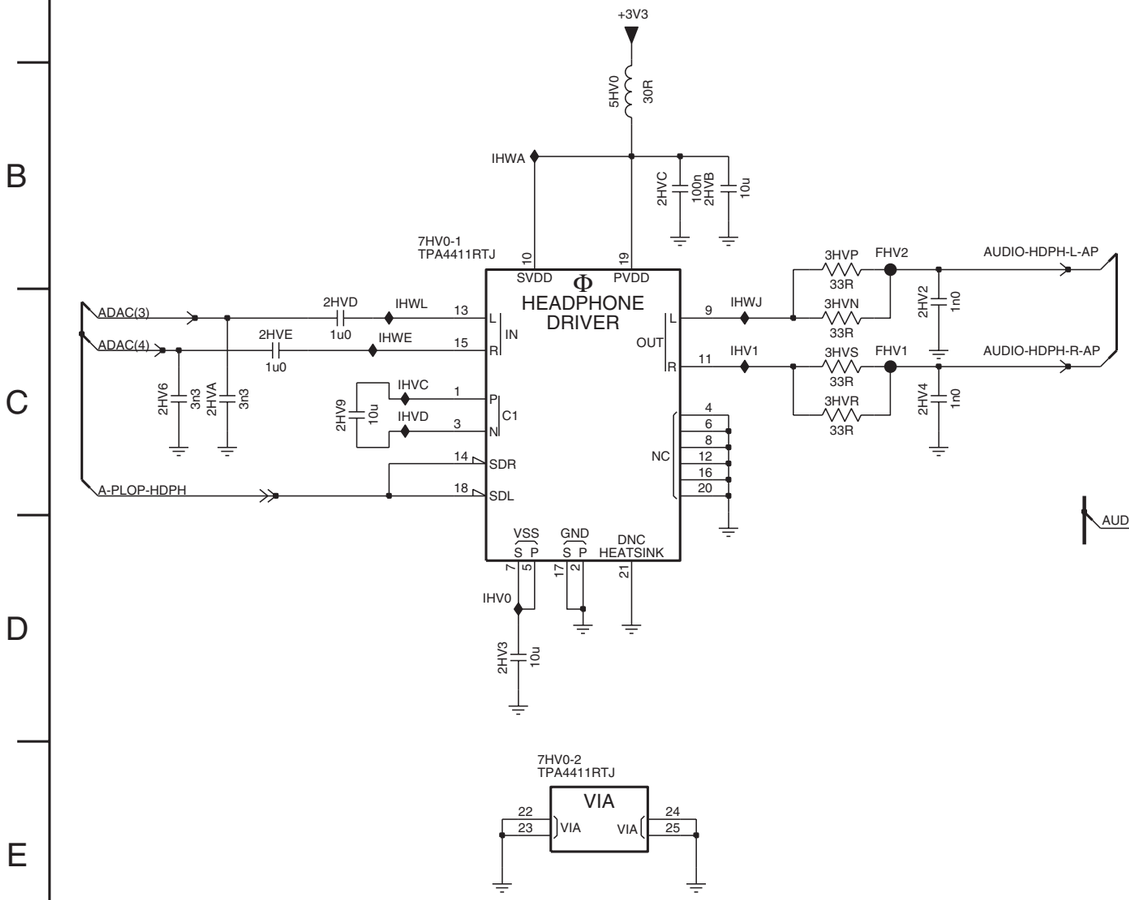
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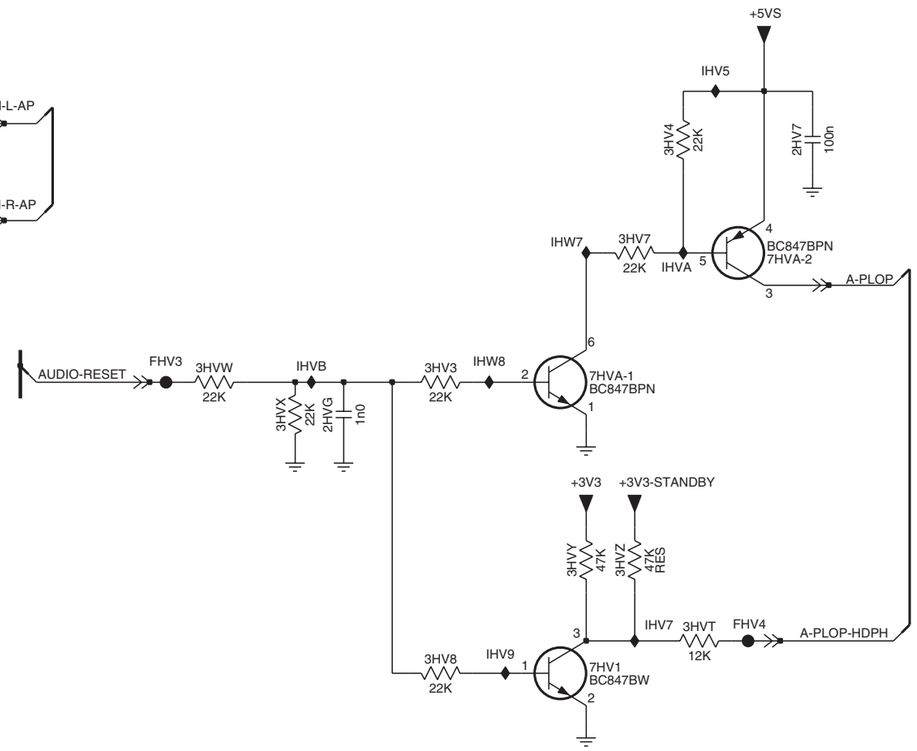
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2HP7 E8
2HP8 E7
2HPA E10
2HPB E9
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2HR2 C4
2HR3 C5
2HR4 C4
2HR5 C4
2HR6 D4
2HR7 D4
2HR8 D4
2HR9 D4
2HRA D4
2HRB D4
2HRC D4
2HRD D4
2HRE E4
2HRF E4
2HRG E3
2HRH E4
2HRJ E3
2HRK E4
2HRM F3
2HRN F3
2HRP F4
2HRS F9
2HRT F9
2HRU F3
2HRV F3
2HRW G4
2HRY G4
3HAG E10
3HAH E9
3HP0 F7
3HP1 F8
3HP2 F7
3HP3 F8
3HP4 F7
3HP5 F8
3HP6 F7
3HP7 F8
3HPN F8
3HR0 C4
3HR1 C3
3HR2 C4
3HR3 C4
3HR4 C3
3HR5 D3
3HR6 D3
3HR7 D3
3HR8 D3
3HR9 D3
3HRA D3
3HRB D3
3HRC D3
3HRD E3
3HRE E2
3HRF E3
3HRG E2
3HRH E3
3HRJ E2
3HRK G4
3HRM G4
3HRN G4
3HSC C3
3HT7 F8
3HT8 F8
5HP1 D10
5HP2 D8
5HRZ E3
7H00-1 D6
7HP0 D9
FHPE D9
IHPD F8
IHRH C4
IHRJ C4
IHRK F4
IHRL F4
IHRM F4
IHRT E3
IHRU E3
IHRV E3
IHRW D3
IHRY D3
IHRZ D3
IHS0 D3
IHS1 C3
IHSU E5
IHSV E4
IHSW D8
IHSX D10
IHSY E9

SSB: PNX 85xx: Audio

B04M PNX 85xx: AUDIO

B04M





2HV2 C4
2HV3 D2
2HV4 C4
2HV6 C1
2HV7 B8
2HV9 C2
2HVA C1
2HVB B3
2HVC B3
2HVD C2
2HVE C1
2HVG D6
3HV3 D7
3HV4 B8
3HV7 C8
3HV8 E7
3HVN C4
3HVP B4
3HVR C4
3HVS C4
3HVT E8
3HVW D6
3HVX D6
3HVY D7
3HVZ D8
5HV0 B3
7HV0-1 B2
7HV0-2 E3
7HV1 E8
7HVA-1 D8
7HVA-2 C8
FHV1 C4
FHV2 B4
FHV3 C6
FHV4 E8
IHV0 D2
IHV1 C4
IHV5 B8
IHV7 E8
IHV9 E7
IHVA C8
IHVB C6
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IHVD C2
IHW7 C7
IHW8 C7
IHWA B2
IHWE C2
IHWJ C4
IHWL C2

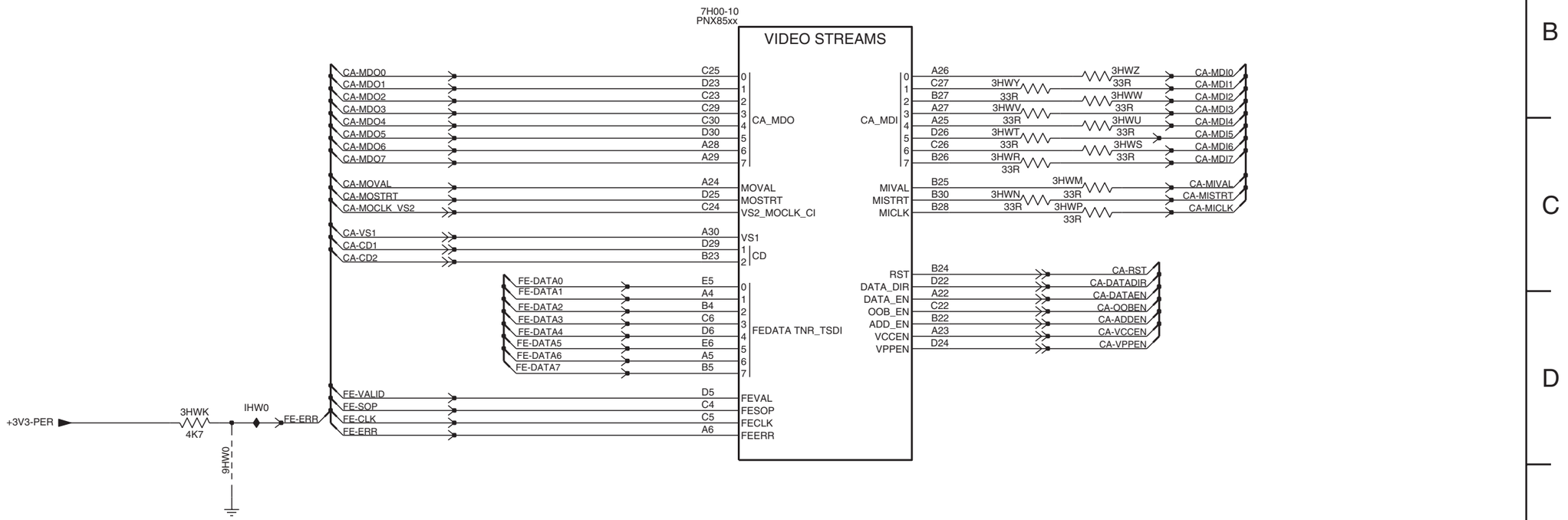
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SSB: PNX 85xx: Video Streams

B04N PNX 85xx: VIDEO STREAMS

B04N

3HWK D2
3HWM C7
3HWN C7
3HWP C7
3HWR C7
3HWS C7
3HWT C7
3HWU C7
3HWV B7
3HWW B7
3HWY B7
3HWZ B7
7H00-10 B5
9HW0 D2
IHW0 D2



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SSB: PNX 85xx: Digital Video

B04O PNX 85xx: DIGITAL VIDEO OUT / LVDS

B04O

1F00 B7
3HP9 C5
7H00-7 B4
7H00-8 A1
9HP9 B6
9HW3 B2
9HW4 B2
9HW5 B2
9HW6 D2
9HW7 D2
9HW8 D2
9HW9 D2
9HWA C2
9HWB C2
9HWC C2
9HWD C2
9HWE C2
9HWF C2
9HWG C2
9HWH C2
9HWJ C2
9HWK C2
9HWM C2
9HWN C2
9HWP B2
9HWR B2
9HWS B2
9HWT B2
9HWU B2
9HWV B2
9HWW B2
9HWY B2
9HWZ B2
IHP5 B7
IHP6 B7
IHP7 B7
IHP8 B7
IHP9 B7
IHPA D7
IHPB D7
IHPG C5

7H00-8
PNX85xx

VID_OUT_TTL

R_OUT	R0_Y2	AJ19	9HW5	DV-R0_Y2
	R1_Y3	AH19	9HW4	DV-R1_Y3
	R2_Y4	AG19	9HW3	DV-R2_Y4
	R3_Y5	AF19	9HWZ	DV-R3_Y5
	R4_Y6	AK20	9HWY	DV-R4_Y6
	R5_Y7	AJ20	9HWW	DV-R5_Y7
	R6_Y8	AH20	9HWV	DV-R6_Y8
	R7_Y9	AG20	9HWU	DV-R7_Y9
G_OUT	G0_UV2	AG17	9HWT	DV-G0_UV2
	G1_UV3	AF17	9HWS	DV-G1_UV3
	G2_UV4	AK18	9HWR	DV-G2_UV4
	G3_UV5	AJ18	9HWP	DV-G3_UV5
	G4_UV6	AH18	9HWN	DV-G4_UV6
	G5_UV7	AG18	9HWM	DV-G5_UV7
	G6_UV8	AF18	9HWK	DV-G6_UV8
	G7_UV9	AK19	9HWJ	DV-G7_UV9
B_OUT	B0_UART	AF15	9HWH	DV-B0_UART2-RX
	B1_UART	AK16	9HWG	DV-B1_UART2-TX
	B2_GPIO	AJ16	9HWF	DV-B2_DEBUG-BREAK
	B3_GPIO	AH16	9HWE	DV-B3_AUDIO-MUTE
	B4_UV0	AG16	9HWD	DV-B4_UV0
	B5_UV1	AF16	9HWC	DV-B5_UV1
	B6_Y0	AJ17	9HWB	DV-B6_Y0
	B7_Y1	AH17	9HWA	DV-B7_Y1
CLK		AK17	9HW6	DV-CLK
VSYNC		AH15	9HW7	DV-VS
HSYNC		AG15	9HW8	DV-HS
AUX2		AF20	9HW9	DV-FF_DE

7H00-7
PNX85xx

LVDS

IREF		AG21	IHPG	3HP9 12K VDDA-LVDS
CLK	P	AK23		Tx8535oCLK+
	N	AJ23		Tx8535oCLK-
A	P	AK21		Tx8535oA+
	N	AJ21		Tx8535oA-
B	P	AK22		Tx8535oB+
	N	AJ22		Tx8535oB-
C	P	AH22		Tx8535oC+
	N	AG22		Tx8535oC-
D	P	AH23		Tx8535oD+
	N	AG23		Tx8535oD-
E	P	AK24		Tx8535oE+
	N	AJ24		Tx8535oE-

1F00 *

+12V-DISP	9HP9	IHP5
		IHP6
		IHP7
		IHP8
		IHP9
Tx8535oA-		12
Tx8535oA+		13
Tx8535oB-		15
Tx8535oB+		16
Tx8535oC-		18
Tx8535oC+		19
Tx8535oCLK-		21
Tx8535oCLK+		22
Tx8535oD-		24
Tx8535oD+		25
Tx8535oE-		27
Tx8535oE+		28
		IHPA 30
		IHPB 31
		33 32

FI-WE31P-HFE-E1500
RES

LVDS CONNECTOR
FOR
FACTORY
USE
ONLY

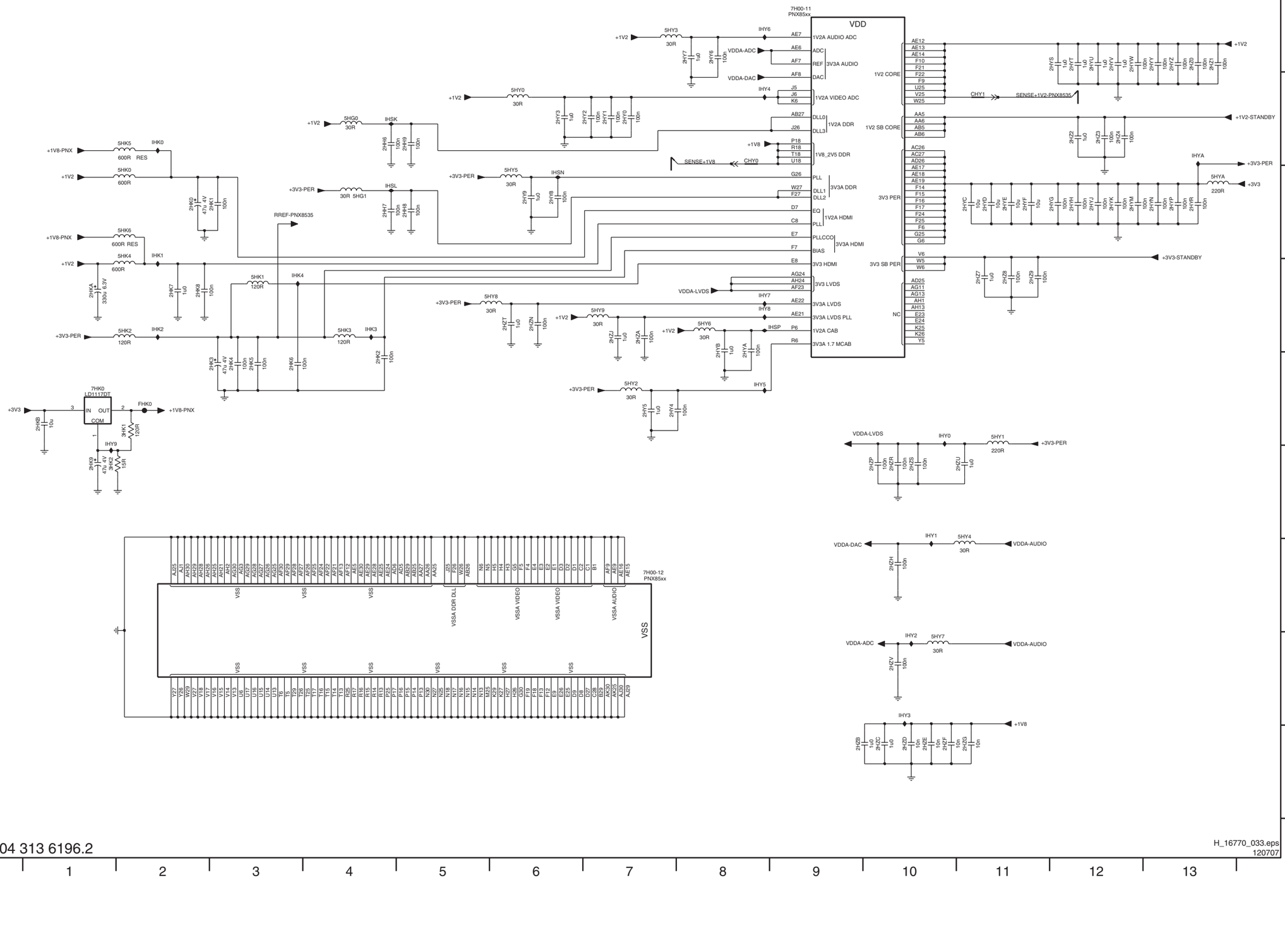
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SSB: PNX 85xx: Power

B04P PNX 85xx: POWER

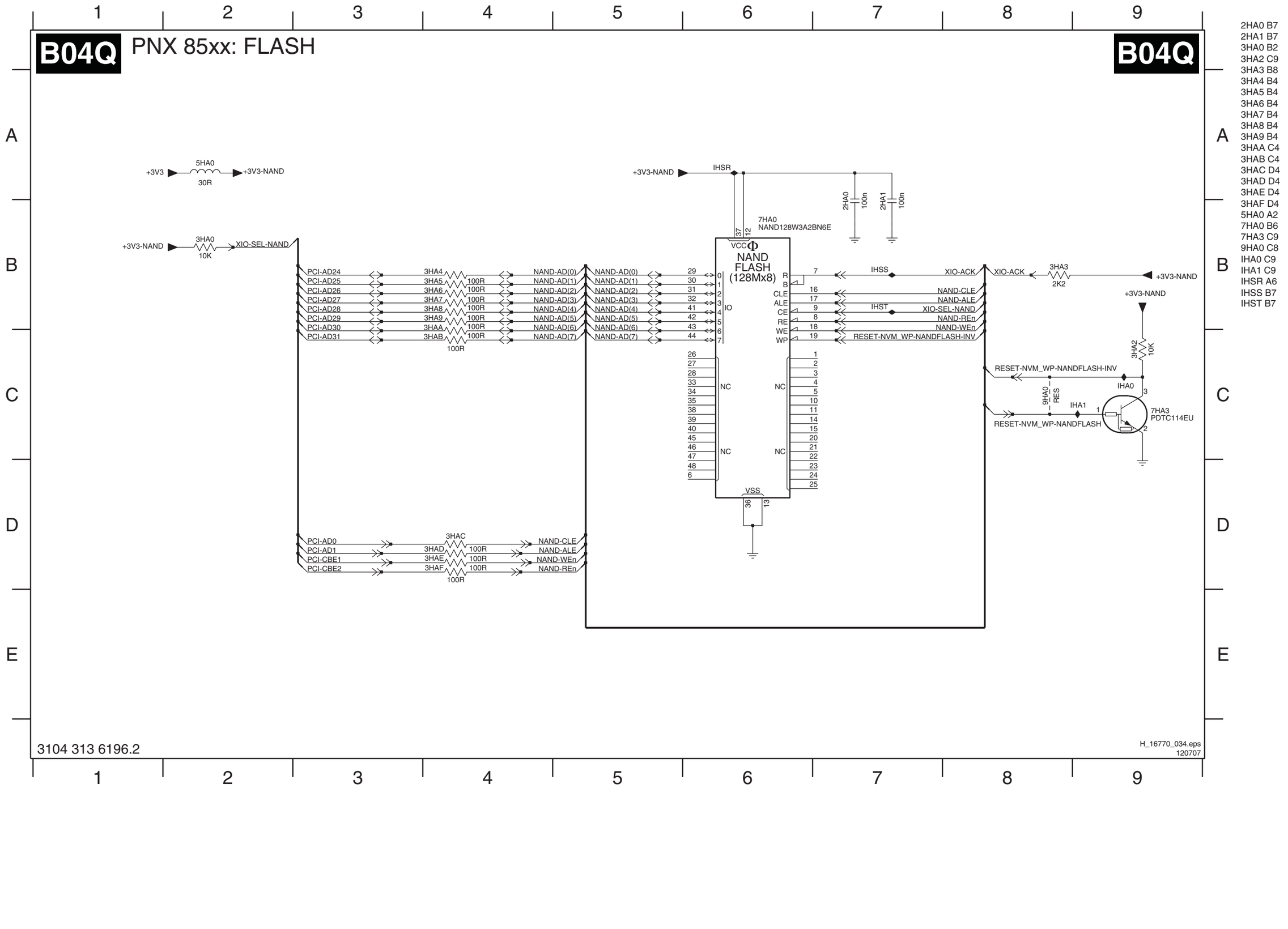
B04P



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2HH6 B4
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2HH8 C5
2HH9 B5
2HK0 C2
2HK1 C3
2HK2 E4
2HK3 E3
2HK4 E3
2HK5 E3
2HK6 E3
2HK7 D2
2HK8 D2
2HK9 F1
2HKA D1
2HKB E1
2HY0 B7
2HY1 B7
2HY2 B7
2HY3 B6
2HY4 E7
2HY5 E7
2HY6 A8
2HY7 A8
2HY8 C6
2HY9 C6
2HYA D8
2HYB D8
2HYC C11
2HYD C11
2HYE C11
2HYF C11
2HYG C12
2HYH C12
2HYJ C12
2HYK C12
2HYM C12
2HYN C13
2HYP C13
2HYR C13
2HYS A12
2HYT A12
2HYU A12
2HYV A12
2HYW A12
2HYY A13
2HYZ A13
2HZ0 A13
2HZ1 A13
2HZ2 B12
2HZ3 B12
2HZ4 B12
2HZ7 D11
2HZ8 D11
2HZ9 D11
2HZA D7
2HZB I9
2HZC I10
2HZD I10
2HZE I10
2HZF I10
2HZG I11
2HZH G10
2HZJ D7
2HZN D6
2HZP F10
2HZR F10
2HZS F10
2HZT D6
2HZU F11
2HZV H10
3HK1 E2
3HK2 F1
5HG0 B4
5HG1 C4
5HK0 C2
5HK1 D3
5HK2 D2
5HK3 D4
5HK4 C2
5HK5 B2
5HK6 C2
5HY0 B6
5HY1 E11
5HY2 E7
5HY3 A7
5HY4 F11
5HY5 C6
5HY6 D8
5HY7 H10
5HY8 D6
5HY9 D7
5HYA C13
7H00-11 A9
7H00-12 G7
7HK0 E1
CHY0 B8
CHY1 B11
FHK0 E2
IHK0 B2
IHK1 C2
IHK2 D2
IHK3 D4
IHK4 D3
IHSK B4
IHSL C4
IHSN C6
IHSP D9
IHY0 E10
IHY1 F10
IHY2 H10
IHY3 H10
IHY4 B8
IHY5 E8
IHY6 A8
IHY7 D8
IHY8 D8
IHY9 E1
IHYA B13

SSB: PNX 85xx: Flash



2HA0 B7
2HA1 B7
3HA0 B2
3HA2 C9
3HA3 B8
3HA4 B4
3HA5 B4
3HA6 B4
3HA7 B4
3HA8 B4
3HA9 B4
3HAA C4
3HAB C4
3HAC D4
3HAD D4
3HAE D4
3HAF D4
5HA0 A2
7HA0 B6
7HA3 C9
9HA0 C8
IHA0 C9
IHA1 C9
IHSR A6
IHSS B7
IHST B7

3104 313 6196.2

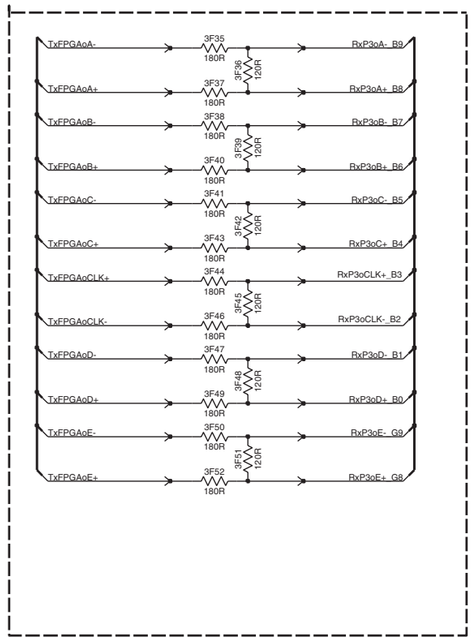
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120707

SSB: FPGA 1080p: Interface

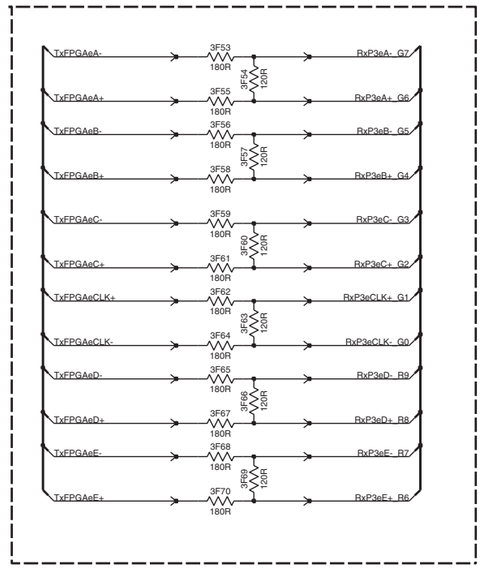
B05A FPGA 1080p: INTERFACE

B05A

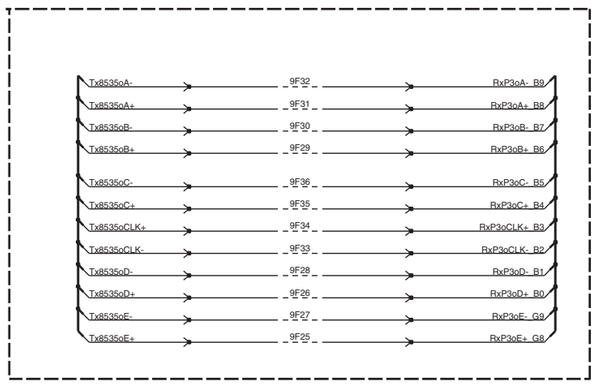
FPGA -single/dual odd LVDS-output



FPGA -dual even LVDS-output



FPGA - bypass



3F35 A11
3F36 B11
3F37 B11
3F38 B11
3F39 B11
3F40 B11
3F41 B11
3F42 C11
3F43 C11
3F44 C11
3F45 C11
3F46 C11
3F47 C11
3F48 D11
3F49 D11
3F50 D11
3F51 D11
3F52 D11
3F53 F11
3F54 F11
3F55 F11
3F56 G11
3F57 G11
3F58 G11
3F59 G11
3F60 G11
3F61 G11
3F62 H11
3F63 H11
3F64 H11
3F65 H11
3F66 H11
3F67 H11
3F68 I11
3F69 I11
3F70 I11
9F25 I5
9F26 I5
9F27 I5
9F28 I5
9F29 H5
9F30 H5
9F31 G5
9F32 G5
9F33 H5
9F34 H5
9F35 H5
9F36 H5

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190307

SSB: FPGA 1080p: Power & Control

B05B FPGA 1080P: POWER + CONTROL

B05B

FFA0 +1V2-PLL
5FA2 220R
2FA0 1u0
2FA9 4u7
2FA1 10n
2FA2 10n
2FA3 10n
2FA4 10n

IFB1 +1V2-STAB
5FB1 220R
5FB2 220R
FFA1 +1V2-FPGA
2FB9 4u7
2FC0 220u 25V
2FB0 1u0
2FB1 10n
2FB2 10n
2FB3 10n
2FB4 10n
2FB5 10n
2FB6 10n
2FB7 10n
2FF5 RES 22u

+1V4
5FA4 RES 220R
5FA5 RES 220R
3FB1 100R RES
3FB3 10K RES
CFA0
SENSE+1V4

5FA6 30R
+3V3
FFA2 +3V3-FPGA
2FD0 1u0
2FD1 10n
2FD2 10n
2FD8 10n
2FD3 10n
2FD4 10n
2FD5 10n
2FD9 10n
2FD6 10n
2FD7 10n
2FE7 10n

IFA5 5FA7 30R
+2V5-STAB
FFA3 +2V5out-FPGA
2FE0 4u7
2FE1 10n
2FE2 10n
2FE3 10n
2FE4 10n
2FE5 10n
2FE6 10n

RESERVED
MP-LED5
MP-LED4
MP-LED3
MP-LED2
MP-LED1
IFB4 IFB5 IFB6 IFB7 IFB8
3FC1 330R
3FC3 330R
3FC5 330R
3FB4 330R
3FB6 330R
6FA1 SML-310
6FA2 SML-310
6FA3 SML-310
6FA4 SML-310
6FA5 SML-310
3104 313 6196.2

+3V3
5FA1 30R
IFA1
2FF2 RES 10n
2FF1 10n
RES 7FA3 EPCS4SI8
VCC
SCD
CS
DATA
DCLK
ASDI
GND
IFA2 nCSO
IFA3 DCLK
IFA9 ASDO
DATA0

ON-MODE
FFK1
3FC7 RES 100K
IFA7
7FA0 RES BC847BW
2FC1 RES 1u0
3FC8 RES 100K
3FB2 10K
FFA7
nCONFIG
CONF-DONE
10K 3FA1
IFA6
3FC6 100K
100K 3FA2
7FA1 BC847BW
+3V3-FPGA
3K3 3FA0
SML-310 6FA0

JTAG-TD-PNX5050-PNX8535
JTAG-TD-PACIFIC-PNX5050
3FA5 1K0
3FA3 1K0
3FA4 1K0
RES
TCK
TDO
TMS
TDI
3FA6 100R FFA4
3FA7 100R FFA5
3FA8 100R FFA6
3FB8 100R FFA8
FFA9
1FA0 5-147279-2
3FB9 1K0

FFB0 +Vin-FPGA
5FA8 30R
2FF0 1u0
2FF3 10n
2FF4 10n
2FF6 10n
2FF7

7FA4 LD3985M25
IN OUT
INH BP
COM
IFB2
2FA5 100n
2FA7 10n
2FA6 1u0

7FK1 RES LD1117DT25
IN OUT
COM
+2V5-STAB
2FK7 RES 220u 25V
2FK8 RES 100n

6FA6 RES STPS2L30A
9FA1
6FA7 RES STPS2L30A
9FA2 RES
7FA5 RES LD1117DT12
IFB3
2FA8 100n
2FC2 1u0
+1V2-STAB

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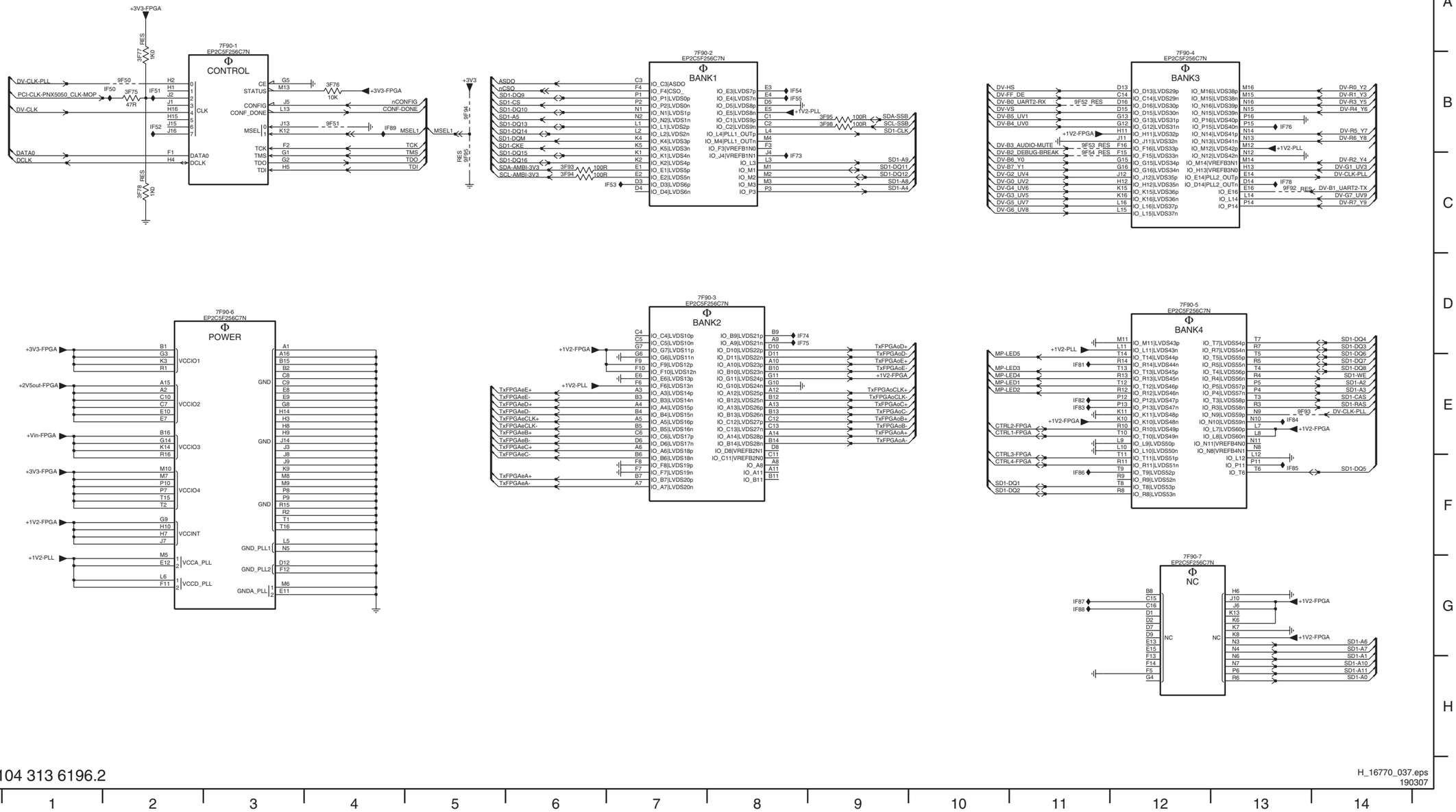
1FA0 D9 3FC6 C9
2FA0 A2 3FC7 C6
2FA1 A3 3FC8 D6
2FA2 A4 5FA1 A7
2FA3 A4 5FA2 A2
2FA4 A4 5FA4 B1
2FA5 E4 5FA5 B1
2FA6 E6 5FA6 C1
2FA7 E5 5FA7 C1
2FA8 F8 5FA8 D4
2FA9 A3 5FB1 A1
2FB0 B2 5FB2 A1
2FB1 B3 6FA0 C9
2FB2 B3 6FA1 F1
2FB3 B3 6FA2 F2
2FB4 B3 6FA3 F2
2FB5 B4 6FA4 F3
2FB6 B4 6FA5 F3
2FB7 B4 6FA6 F7
2FB9 B2 6FA7 F7
2FC0 B2 7FA0 C7
2FC1 D6 7FA1 C9
2FC2 F9 7FA3 B7
2FD0 C1 7FA4 E5
2FD1 C2 7FA5 F8
2FD2 C2 7FK1 F5
2FD3 C3 9FA1 F7
2FD4 C3 9FA2 F7
2FD5 C3 CFA0 B5
2FD6 C4 FFA0 A2
2FD7 C4 FFA1 A3
2FD8 C2 FFA2 C1
2FD9 C3 FFA3 C2
2FE0 D1 FFA4 D9
2FE1 D1 FFA5 D9
2FE2 D2 FFA6 E9
2FE3 D2 FFA7 C7
2FE4 D2 FFA8 E9
2FE5 D2 FFA9 E9
2FE6 D2 FFB0 D6
2FE7 C4 FFK1 C6
2FF0 D5 IFA1 A7
2FF1 A6 IFA2 B7
2FF2 A6 IFA3 B7
2FF3 D5 IFA5 C1
2FF4 D5 IFA6 C8
2FF5 B5 IFA7 C6
2FF6 D5 IFA9 B7
2FF7 D6 IFB1 A1
2FK7 F4 IFB2 E5
2FK8 F5 IFB3 F8
3FA0 B9 IFB4 E1
3FA1 C9 IFB5 E2
3FA2 C9 IFB6 E2
3FA3 D8 IFB7 E3
3FA4 D8 IFB8 E3
3FA5 D8
3FA6 D8
3FA7 E8
3FA8 E8
3FB1 B5
3FB2 C7
3FB3 B5
3FB4 F3
3FB6 F3
3FB8 E9
3FB9 E8
3FC1 F1
3FC3 F2
3FC5 F2

SSB: FPGA 1080p: I/O Banks

B05C FPGA 1080P: I/O BANKS

B05C

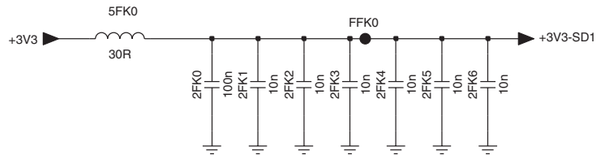
3F75 B2
3F76 B4
3F77 B2
3F78 C2
3F93 C6
3F94 C6
3F95 B9
3F98 B9
7F90-1 A3
7F90-2 B7
7F90-3 D7
7F90-4 B12
7F90-5 D12
7F90-6 D3
7F90-7 G12
9F50 B2
9F51 B4
9F52 B11
9F53 B11
9F54 C11
9F92 C13
9F93 E13
9F94 B5
9F95 C5
IF50 B2
IF51 B2
IF52 B2
IF53 C7
IF54 B8
IF55 B8
IF73 C8
IF74 D8
IF75 D8
IF76 B13
IF78 C13
IF81 E11
IF82 E11
IF83 E11
IF84 E13
IF85 F13
IF86 F11
IF87 G11
IF88 G11
IF89 B4

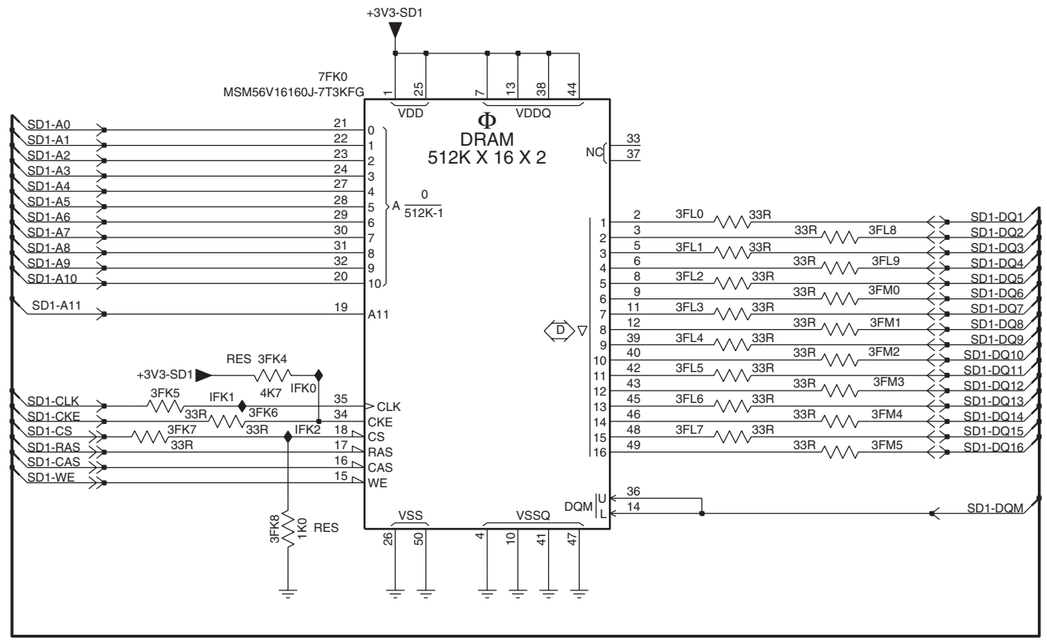


SSB: FPGA 1080p: DRAM

B05D FPGA 1080P: DRAM

B05D





2FK0 B2
2FK1 B2
2FK2 B2
2FK3 B3
2FK4 B3
2FK5 B3
2FK6 B3
3FK4 C6
3FK5 C5
3FK6 C5
3FK7 C5
3FK8 D6
3FL0 B7
3FL1 B7
3FL2 C7
3FL3 C7
3FL4 C7
3FL5 C7
3FL6 C7
3FL7 C7
3FL8 B8
3FL9 C8
3FM0 C8
3FM1 C8
3FM2 C8
3FM3 C8
3FM4 C8
3FM5 C8
5FK0 B2
7FK0 B6
FFK0 B3
IFK0 C6
IFK1 C5
IFK2 C6

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SSB: Pacific 3: LVDS

B06A PACIFIC 3: LVDS

B06A

Single / Dual LVDS input only

RxP3oA+_B8
RxP3oA-_B9
RxP3oB+_B6
RxP3oB-_B7
RxP3oC+_B4
RxP3oC-_B5
RxP3oCLK-_B2
RxP3oCLK+_B3
RxP3oD+_B0
RxP3oD-_B1
RxP3oE+_G8
RxP3oE-_G9

RxP3eA+_G6
RxP3eA-_G7
RxP3eB+_G4
RxP3eB-_G5
RxP3eC+_G2
RxP3eC-_G3
RxP3eCLK-_G0
RxP3eCLK+_G1
RxP3eD+_R8
RxP3eD-_R9
RxP3eE+_R6
RxP3eE-_R7

Dual LVDS input only

Dual LVDS only

TXEA-, TXEA+, TXEB-, TXEB+, TXEC-, TXEC+, TXECLK-, TXECLK+, TXED-, TXED+, TXEE-, TXEE+
TXOA-, TXOA+, TXOB-, TXOB+, TXOC-, TXOC+, TXOCLK-, TXOCLK+, TXOD-, TXOD+, TXOE-, TXOE+

VDISP
CTRL-DISP1
CTRL-DISP2
CTRL-DISP3
CTRL-DISP4
SCL-I2C4-DISP
SDA-I2C4-DISP

FI-RE41S-HF

LVDS CONNECTOR

1G50 A13
2G00 B9
2G01 B9
2G02 C9
2G03 C9
2G04 C9
2G05 C9
2G06 D9
2G07 D9
2G08 D9
2G09 D9
2G10 E9
2G11 E9
2G12 E9
2G13 E9
2G14 F9
2G15 F9
2G16 F9
2G17 F9
2G18 G9
2G19 G9
2G20 G9
2G21 G9
2G22 H9
2G23 H9
2G52 E13
2G53 E12
3G00 B3
3G01 B3
3G02 C3
3G03 C3
3G04 D3
3G05 D3
3G06 E3
3G07 E3
3G08 F3
3G09 F3
3G10 G3
3G11 G3
3G52 D12
3G53 D13
5G00 B9
5G01 C9
5G02 C9
5G03 D9
5G04 D9
5G05 E9
5G06 E9
5G07 F9
5G08 F9
5G09 G9
5G10 G9
5G11 H9
FG00 A13
FG01 B13
FG02 B13
FG03 B13
FG04 B13
FG05 B13
FG06 B13
FG07 B13
FG08 C13
FG09 C13
FG10 C13
FG11 C13
FG12 C13
FG13 C12
FG14 C13
FG15 C12
FG16 C13
FG17 C12
FG18 C13
FG19 D13
FG20 D13
FG21 D13
FG22 D13
FG23 D13
FG24 D12
FG25 D13
FG26 D13

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190307

SSB: Pacific 3: Display & Interfacing

B06B PACIFIC 3: DISPLAY-INTERFACING

B06B

VDISP-SWITCH

I2C-BUFFER *

TO DISPLAY

RESERVED

RESERVED

RESERVED

NOTE : CAN BE CAPACITOR OR WIRE BRIDGE

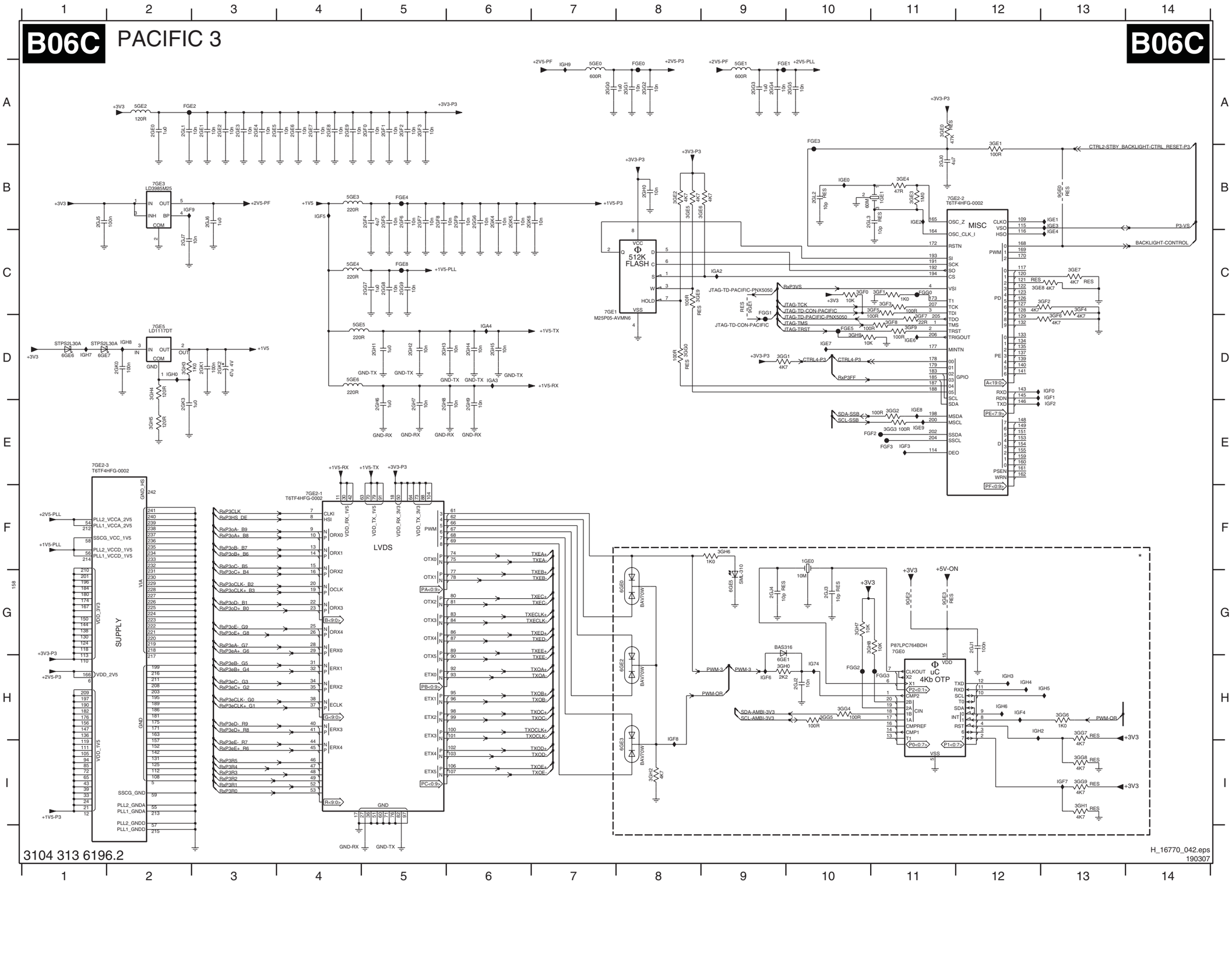
FHP	SDI
IRQ	RESET
PDWN	
CPU-GO	
PDP-GO	

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190307

1D42 B7	7G51 D10
2G50 H4	7G52 B2
2G51 H3	7G53 E11
2G54 B4	7G54 B3
2G55 E10	7G55 C4
2G57 C2	7G56 F11
2G58 G12	7G57 G4
2G59 F12	7G58-1 E13
2G60 C4	7G58-2 E12
2G61 A11	7G59-1 G11
2G62 A11	7G59-2 G12
2G63 E4	7G60-1 A12
2G64 E5	7G60-2 A12
2G65 E5	7G61-1 B12
2G66 E5	7G61-2 C12
2G67 B12	7G65 H12
2G68 C12	7G66-1 H13
2G69 C6	7G66-2 H13
2G70 C7	9G48 I10
2G71 C8	9G49 H10
2G72 C8	9G50 H3
2G75 D13	9G53 I3
2G76 B4	9G54 I3
2G78 I11	9G55 E10
2G79 I12	9G56 F12
3G50 H4	9G57 A12
3G51 H4	9G58 B12
3G54 D10	9G59 C12
3G55 E12	9G60 C12
3G56 B4	9G61 B2
3G57 E11	9G77 B1
3G58 E10	9G78 B1
3G59 C2	9G79 C1
3G60 D3	9G80 C1
3G61 E11	9G82 I12
3G62 F11	FG50 B4
3G63 C2	FG51 D5
3G64 C3	FG52 E5
3G65 F12	FG53 E5
3G66 F13	FG54 E5
3G67 C4	FG55 B7
3G68 C5	FG56 B8
3G69 F10	FG57 C7
3G70 F11	FG58 C7
3G71 D2	FG59 D13
3G72 D4	FG60 B6
3G73 G10	IG50 H2
3G76 D4	IG51 I2
3G77 D5	IG52 D10
3G78 D5	IG53 C2
3G79 D5	IG54 B2
3G80 D3	IG55 A12
3G81 E3	IG58 A12
3G82 A11	IG59 F2
3G83 A12	IG60 A12
3G84 E3	IG61 A12
3G85 E3	IG62 B12
3G86 E3	IG64 B12
3G87 A11	IG65 G3
3G88 F3	IG66 C12
3G89 B12	IG67 C12
3G90 F3	IG68 C12
3G91 F3	IG69 C12
3G92 B12	IG70 D12
3G93 F3	IG71 C4
3G94 F4	IG72 D2
3G95 B12	IG73 E2
3G96 F3	IG75 E2
3G97 G3	IG77 F2
3G98 G3	IG78 F2
3G99 G3	IG79 F2
3GA0 B12	IG80 H3
3GA1 C12	IG81 H5
3GA2 C12	IG82 I4
3GA3 C12	IG83 I4
3GA4 G11	IG84 E10
3GA5 D10	IG85 E12
3GA6 E11	IG86 E11
3GA7 B8	IG87 E12
3GA8 B6	IG88 E10
3GA9 B8	IG89 E10
3GB0 C8	IG90 F13
3GB5 B6	IG91 D10
3GB7 H12	IG92 B3
3GB8 H12	IG93 C4
3GB9 H12	IG94 C4
3GC0 H11	IG95 C3
3GC1 I11	IG96 C2
3GC2 I12	IG97 D4
3GC3 I13	IGA5 H13
3GC4 D13	IGA6 H12
3GC8 I11	IGA7 H12
5G50 H2	IGA8 H11
5G51 H2	IGA9 H11
5G55 B4	IGB0 I13
5G56 B4	IGB1 F11
6G50 C2	IGB2 G12
6G51 B4	IGB3 G11
6G52-1 H4	
6G52-2 H6	
6G55 D13	
7G50 H2	

SSB: Pacific 3

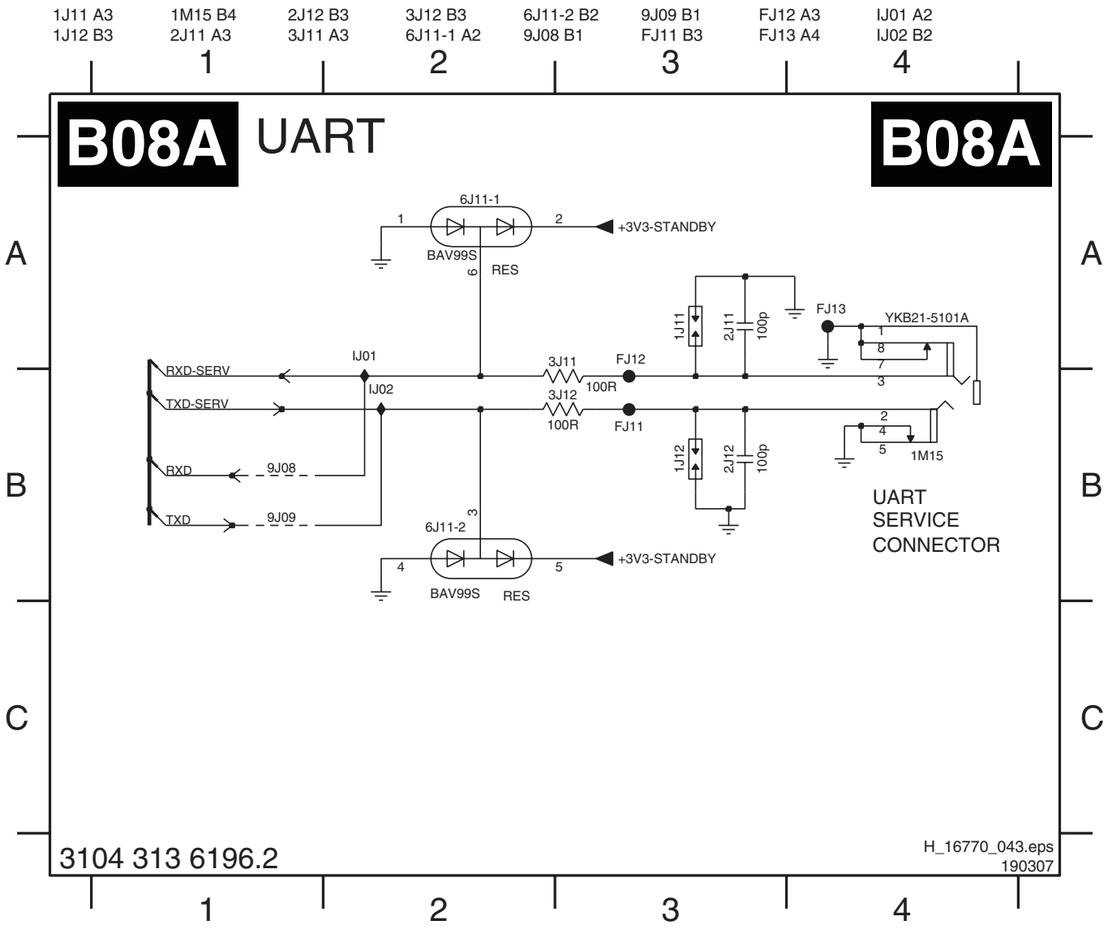
B06C PACIFIC 3



3104 313 6196.2

1GE0	F10	5GE5	D4
1GE1	B11	5GE6	D4
2GE0	A2	6GE0	G8
2GE1	A3	6GE1	H9
2GE2	A3	6GE2	H8
2GE3	A3	6GE3	I8
2GE4	A3	6GE5	G9
2GE5	A3	6GE6	D1
2GE6	A4	6GE7	D1
2GE7	A4	7GE0	G11
2GE8	A4	7GE1	C7
2GE9	A4	7GE2-1	F4
2GF0	A5	7GE2-2	B12
2GF1	A5	7GE2-3	E1
2GF2	A5	7GE3	B2
2GF3	A5	7GE5	D2
2GF4	B5	9GE0	B13
2GF5	B5	9GE1	C9
2GF6	B5	9GE2	G11
2GF7	B5	9GE3	G11
2GF8	B5	FGE0	A8
2GF9	B6	FGE1	A9
2GG0	A7	FGE2	A2
2GG1	A8	FGE3	A10
2GG2	A8	FGE4	B5
2GG3	A9	FGE5	D10
2GG4	A9	FGE8	C5
2GG5	A10	FGF2	E10
2GG6	B6	FGF3	E11
2GG7	C5	FGG0	C11
2GG8	C5	FGG1	C9
2GG9	C5	FGG2	H10
2GH0	B8	FGG3	H11
2GH1	D5	IG74	H10
2GH2	D5	IGA2	C9
2GH3	D5	IGA3	D6
2GH4	D6	IGA4	D6
2GH5	D6	IGE0	B10
2GH6	E5	IGE1	B13
2GH7	E5	IGE2	B11
2GH8	E5	IGE3	B13
2GH9	E6	IGE4	C13
2GJ0	B11	IGE6	D11
2GJ1	G12	IGE7	D10
2GJ2	H10	IGE8	E11
2GJ3	G10	IGE9	E11
2GJ4	G9	IGF0	D13
2GJ5	B1	IGF1	D13
2GJ6	B3	IGF2	E13
2GJ7	C2	IGF3	E11
2GK0	D2	IGF4	H12
2GK1	D3	IGF5	B4
2GK2	D3	IGF6	H9
2GK3	E2	IGF7	I13
2GK4	B6	IGF8	H8
2GK5	B6	IGF9	B2
2GK6	B6	IGH0	D2
2GL1	A2	IGH2	H12
2GL2	B10	IGH3	H12
2GL3	B10	IGH4	H12
3GE0	A11	IGH5	H13
3GE1	B12	IGH6	H12
3GE2	B8	IGH7	D1
3GE3	B11	IGH8	D2
3GE4	B11	IGH9	A7
3GE5	B8		
3GE6	B9		
3GE7	C13		
3GE8	C12		
3GE9	C8		
3GF0	C10		
3GF1	C11		
3GF2	C13		
3GF3	C11		
3GF4	C13		
3GF5	C11		
3GF6	D13		
3GF7	D11		
3GF8	D11		
3GF9	D11		
3GG0	D8		
3GG1	D9		
3GG2	E11		
3GG3	E11		
3GG4	H10		
3GG5	H10		
3GG6	H13		
3GG7	H13		
3GG8	I13		
3GG9	I13		
3GH0	H9		
3GH1	I13		
3GH2	I8		
3GH3	D2		
3GH4	D2		
3GH5	E2		
3GH6	F9		
3GH7	G10		
3GH8	G10		
3GH9	D10		
5GE0	A7		
5GE1	A9		
5GE2	A2		
5GE3	B4		
5GE4	C4		

SSB: UART



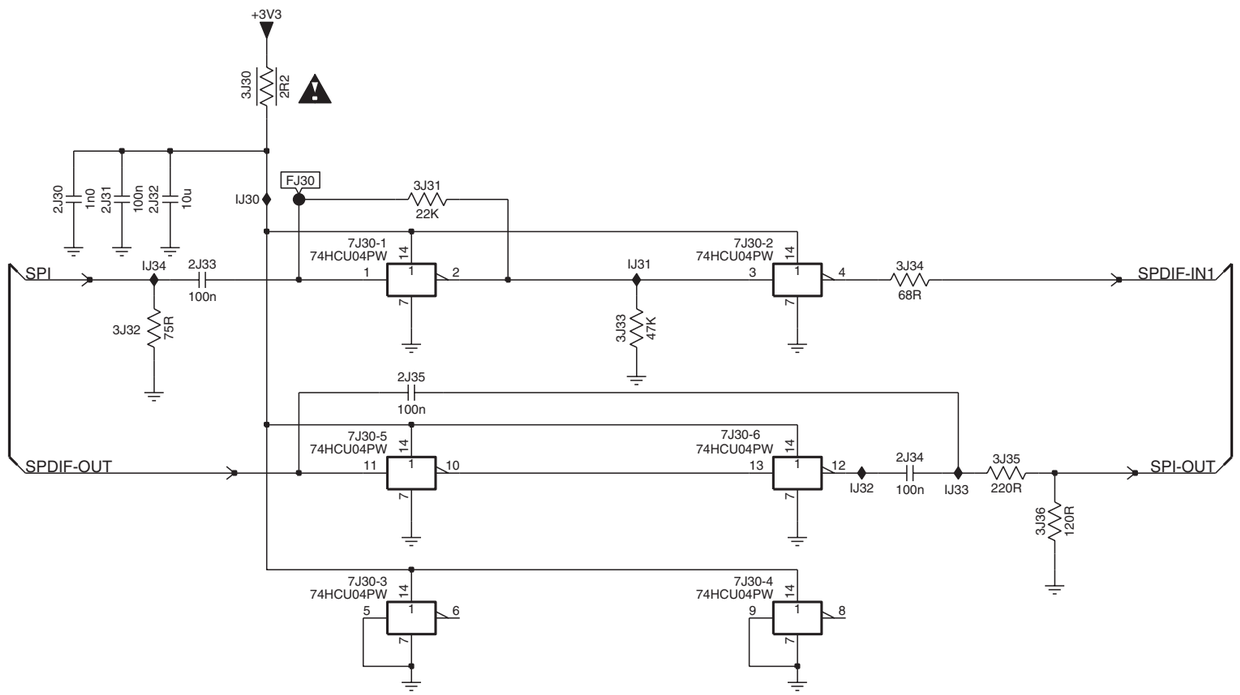
Personal Notes:

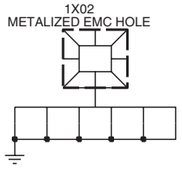
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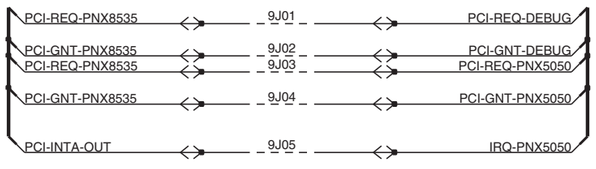
SSB: SPDIF

1X02 E1 2J31 B2 2J33 B2 2J35 C3 3J31 B3 3J33 B4 3J35 C6 7J30-1 B3 7J30-3 D3 7J30-5 C3 9J01 E4 9J03 E4 9J05 E4 IJ30 B3 IJ32 C5 IJ34 B2
2J30 B2 2J32 B2 2J34 C5 3J30 A3 3J32 B2 3J34 B5 3J36 C6 7J30-2 B5 7J30-4 D5 7J30-6 C5 9J02 E4 9J04 E4 FJ30 B3 IJ31 B4 IJ33 C6

B08B SPDIF







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SSB: Externals

B08C EXTERNALS

B08C

MONITOR - OUT

DEBUG / RS232 INTERFACE

FOR FACTORY USD ONLY

3104 313 6196.2

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1C00 C2
1C01 B6
1C02 D6
1C03 A2
1HE1 F14
1HE2 F14
1J15 B7
1J16 C7
1J17 D7
1J50 A3
1J51 B3
1J52 C2
1J53 D2
1J59 H13
1J60 I13
1M16 I14
2J00 A11
2J01 B11
2J02 A13
2J03 A13
2J04 C10
2J05 I13
2J06 H13
2J15 B8
2J16 C8
2J17 D7
2J20 E7
2J41 A4
2J42 A4
2J49 B4
2J61 C4
2J62 C3
2J65 D4
2J66 D3
2J71 B4
2JE1 E12
2JE2 E10
2JE3 E12
2JE4 E12
2JE5 E10
3J00 A11
3J01 A12
3J02 A12
3J03 B12
3J04 B12
3J05 B11
3J06 B12
3J07 D10
3J08 D10
3J10 I12
3J14 E7
3J15 B8
3J16 B8
3J17 C8
3J18 C8
3J20 E7
3J21 E8
3J22 E8
3J23 E7
3J24 E8
3J27 C11
3J28 I12
3J50 C3
3J51 C4
3J53 C4
3J54 C3
3J57 D2
3J58 D4
3J59 D4
3J60 D3
3JE0 F10
3JE1 G10
3JE2 F13
3JE3 F13
3JE4 F13
3JE5 G13
5J39 A13
5J40 A4
5J45 B4
6J15 B7
6J16 B7
6J17 C7
6J18 C7
6J20 D8
6J30 E6
6J31 E6
6J40 A3
6J41 A3
6J42 B3
6J43 B3
6J44 C2
6J45 C2
6J46 D2
6J47 D2
7J38 C10
7J39-1 B12
7J39-2 B12
7J42-1 D3
7J42-2 C3
7J50 E8
7J51 E7
7JE2 E11
9J06 G13
9J07 G13
9JE0 G11
9JE1 G11
9JE3 G11
9JE4 H11
FJ15 B7
FJ16 C7
FJ17 D7
FJ31 B4
FJ40 A3
FJ41 C2
FJ42 D2
FJ53 A1
FJEA F13
FJEB F13
FJEC E11
FJED F13
FJEE F13
FJEF H13
FJEG I13
IJ15 B8
IJ16 B7
IJ17 C8
IJ18 C7
IJ19 A12
IJ20 A12
IJ21 B13
IJ22 B12
IJ23 B11
IJ24 C11
IJ25 C10
IJ26 A12
IJ35 C4
IJ36 D3
IJ37 D4
IJ38 D4
IJ40 A4
IJ46 B4
IJ53 C4
IJ54 C3
IJ57 C4
IJ58 E7
IJ59 E8
IJ60 E6
IJ61 E7
IJ62 D8
IJ65 C3
IJ66 D2
IJ71 A3
IJ72 B3
IJ73 E11
IJ74 E11
IJ75 F11
IJ76 F12
IJ77 F11
IJ78 F11
IJ79 F12
IJ80 F11
IJ81 F12
IJE1 E12
IJE3 E11
IJE4 F12
IJE6 F10
IJE9 G10

SSB: HDMI

B08D HDMI

B08D

HDMI CONNECTOR 1

HDMI CONNECTOR 2

HDMI CONNECTOR 3

EDID NVM HDMI 1

EDID NVM HDMI 2

EDID NVM HDMI 3

1B01 A1 FJB0 A4
1B02 A8 FJB1 A4
1B03 F1 FJB3 B9
1J40 G3 FJB4 B8
1J41 G3 FJB5 C8
1J42 G4 FJB6 C9
1J43 I4 FJB7 C12
1JB0 B3 FJB8 C9
1JB1 B3 FJB9 C8
1JB2 B3 FJC4 A11
1JB3 B10 FJC5 A11
1JB4 B10 IJ39 F9
1JB5 B10 IJ41 B2
1JB6 D4 IJ43 B4
1JB7 D11 IJ44 C12
2JA0 B4 IJ45 C5
2JA1 B4 IJ47 F6
2JA2 B11 IJ48 F7
2JA3 B11 IJ49 G5
2JA4 D5 IJ50 G4
2JA5 D12 IJ51 H5
2JA6 D11 IJ52 H5
2JA7 D4 IJ55 G2
2JG1 G4 IJA0 A6
2JG2 G5 IJA2 A13
2JG3 I4 IJA4 A14
3J13 F9 IJA5 B7
3JA0 A6 IJA6 C5
3JA1 B6 IJA7 D5
3JA4 B5 IJA8 D12
3JA5 C6 IJA9 D12
3JA6 C6 IJB3 B12
3JA7 C5
3JA8 C5
3JA9 D3
3JB0 A13
3JB3 B12
3JB4 C13
3JB5 C13
3JB6 C12
3JB7 C4
3JB8 D6
3JB9 D4
3JC0 C13
3JC1 D11
3JC2 D13
3JC3 D10
3JC4 D11
3JC5 B13
3JC7 E10
3JC8 D3
3JG1 G5
3JG2 G6
3JG3 G6
3JG4 I5
3JG5 H6
3JG6 F6
3JG7 F7
3JG8 H4
3JG9 H6
3JH1 I3
3JH2 I4
3JH3 I3
3JH4 F10
3JH5 G9
3JH6 G5
5JA2 F4
5JA1 B4
5JA2 B11
6J10 I4
6J12 I4
6JA1 D3
6JA2 D4
6JA3 D10
6JA4 D11
7J28 H5
7J29 G4
7JA0 B4
7JA1 B11
7JA2 F10
7JA3 D12
7JE3 D5
9JA0 B2
9JA1 B9
9JA2 A6
9JA4 B1
9JA5 C2
9JA6 B9
9JA7 B9
9JE5 G2
9JE6 G2
9JE7 E9
9JE8 E1
9JE9 A1
9JF0 G2
FJ14 C5
FJ32 F4
FJ33 F4
FJ34 H1
FJ35 G1
FJ36 G2
FJ37 G2
FJ38 G1
FJ39 G1
FJ43 G2
FJA0 B1
FJA1 B1
FJA2 B1
FJA3 C1
FJA4 G5
FJA5 C1
FJA6 C1
FJA7 C1

1X03 METALIZED EMC HOLE

1X07 METALIZED EMC HOLE

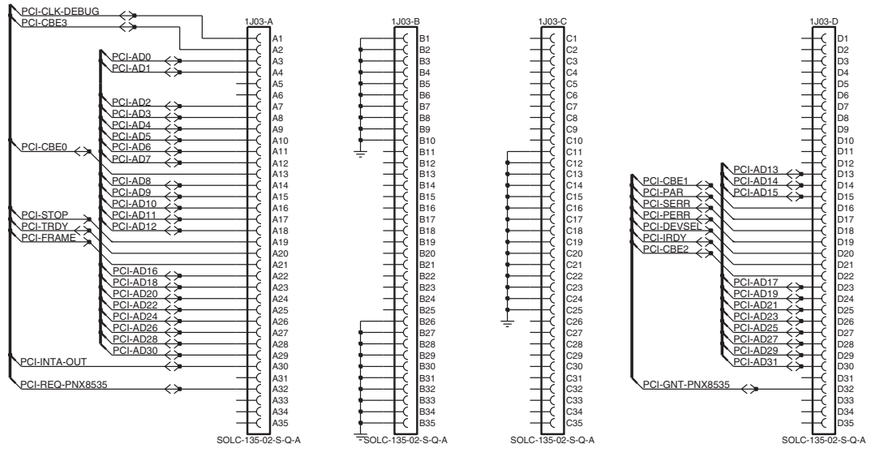
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SSB: Debug

B08E DEBUG **B08E**

1J03-A C5
1J03-B C6
1J03-C C7
1J03-D C9



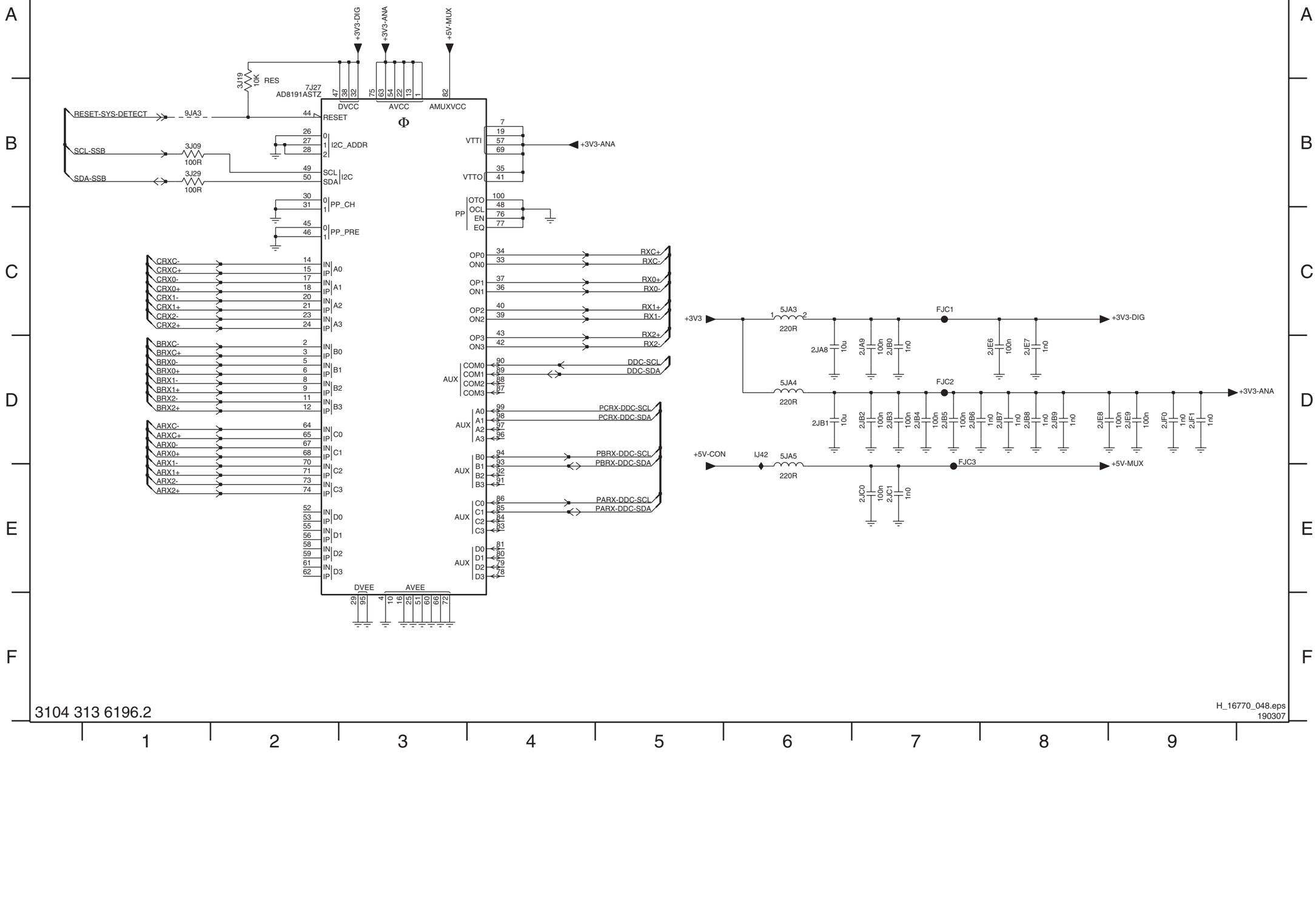
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SSB: HDMI Switch

B08F HDMI SWITCH

B08F



2JA8 D6
2JA9 D7
2JB0 D7
2JB1 D6
2JB2 D7
2JB3 D7
2JB4 D7
2JB5 D7
2JB6 D7
2JB7 D8
2JB8 D8
2JB9 D8
2JC0 E7
2JC1 E7
2JE6 D8
2JE7 D8
2JE8 D8
2JE9 D9
2JF0 D9
2JF1 D9
3J09 B1
3J19 B2
3J29 B1
5JA3 C6
5JA4 D6
5JA5 D6
7J27 B2
9JA3 B1
FJC1 C7
FJC2 D7
FJC3 E7
IJ42 D6

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SSB: Analogue Externals

B09A ANALOGUE EXTERNALS

B09A

EXTERNAL I/O 1

EXTERNAL I/O 3

EXTERNAL I/O 2

PR 1008-3 YKC21-5515N RED

PB 1008-2 YKC21-5515N BLUE

Y 1008-1 YKC21-5515N GREEN

CVBS YELLOW 1006-1 YKC21-6040N YELLOW

SVHS 1007 YKF51-553S

LEFT 1006-2 YKC21-6040N WHITE

RIGHT 1006-3 YKC21-6040N RED

PR 1009-3 YKC21-5515N RED

PB 1009-2 YKC21-5515N BLUE

Y 1009-1 YKC21-5515N GREEN

CVBS YELLOW 1011-1 YKC21-6040N YELLOW

LEFT 1011-2 YKC21-6040N WHITE

RIGHT 1011-3 YKC21-6040N RED

1060(L)

1061(R)

AV1-BLK

AUDIO-IN1-L

AUDIO-IN1-R

DV-B0_UART2-RX

DV-B1_UART2-TX

RXD2

TXD2

+5VS

BOLT-ON-IO

AV1_PR

AV1_PB

AV1_Y

AV1_Y-CVBS

AV1_C

AUDIO-IN1-L

AUDIO-IN1-R

AV3_PR

AV3_PB

AV3_Y

AUDIO-IN3-L

AUDIO-IN3-R

AV2_Y-CVBS

AUDIO-IN2-L

AUDIO-IN2-R

BAV99 COL

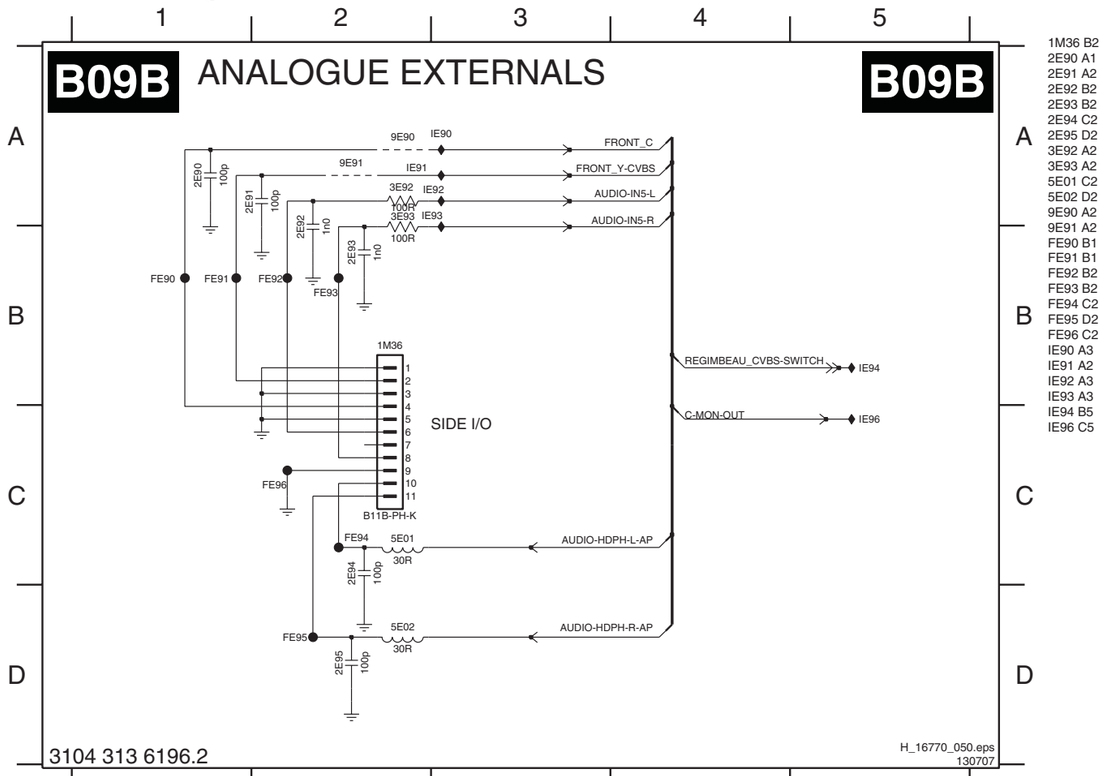
PDZ6.8-B

+12V

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130707

1006-1 F5
1006-2 H5
1006-3 I5
1007 G5
1008-1 D5
1008-2 C5
1008-3 B5
1009-1 C9
1009-2 B9
1009-3 A9
1011-1 F9
1011-2 H9
1011-3 I9
1060 E9
1061 E9
1E28 H7
1E29 I10
1E34 H5
1E36 I5
1E37 H6
1E39 G6
1E41 E5
1E42 D5
1E43 B5
1E44 A10
1E45 C10
1E46 D10
1E47 G10
1E49 H10
1E50 E10
1E51 F10
1R07 B1
1R08 D1
2E06 H6
2E07 I6
2E14 B5
2E15 A10
2E16 C6
2E17 B11
2E20 D5
2E21 C10
2E26 D10
2E27 E5
2E28 G10
2E32 H11
2E33 H7
2E34 I11
2E35 G5
2E36 E12
2E37 F12
2E70 E2
2E71 E2
2E72 E2
2E74 C1
2E75 C2
2E76 E1
3E17 B7
3E18 A11
3E27 C7
3E28 B11
3E36 D12
3E38 E7
3E44 F12
3E45 G11
3E47 H6
3E48 H6
3E52 I6
3E53 I6
3E54 H11
3E55 G8
3E56 H11
3E57 H8
3E58 I11
3E60 F7
3E61 I11
3E62 G6
3E63 E11
3E64 F11
3E65 E11
3E66 E11
3E70 D2
3E71 D2
3E72 E2
3E74 C2
3E75 C2
5E70 D1
6E07 H6
6E08 I6
6E09 I6
6E10 B6
6E11 A11
6E12 B6
6E13 A10
6E14 C6
6E15 B11
6E16 D6
6E17 C10
6E18 C11
6E19 E6
6E20 D11
6E21 E6
6E23 G10
6E28 I6
6E29 H10
6E30 H8
6E31 I10
6E33 I10
6E35 I10
6E36 G6
6E37 E11
6E38 E11
6E39 E11
6E40 F11
9E10 A12
9E11 B12
9E12 C12
9E20 D3
9E21 D3
9E22 D3
9E23 D3
9E70 B7
9E72 C7
9E73 E7
9E74 C2
FE00 B8
FE02 C8
FE04 E8
FE07 H5
FE09 I5
FE10 A10
FE11 B4
FE12 A9
FE13 B10
FE14 C10
FE19 I10
FE20 G7
FE21 I10
FE24 I9
FE26 F4
FE27 E10
FE28 E10
FE29 F7
FE30 F11
FE70 B1
FE71 B1
FE72 B1
FE73 C1
FE74 C1
FE75 C1
FE76 C1
FE80 D1
FE81 D1
FE82 D1
FE83 D1
FE84 E1
IE10 A13
IE11 B13
IE12 C13
IE13 F8
IE14 F13
IE15 G8
IE16 B6
IE17 A10
IE24 D6
IE25 C10
IE35 D11
IE36 E6
IE39 H6
IE40 H6
IE42 I6
IE43 I6
IE44 H12
IE45 H10
IE47 I12
IE48 I10
IE50 E12
IE51 E12
IE52 E10
IE53 E10

SSB: Analogue Externals



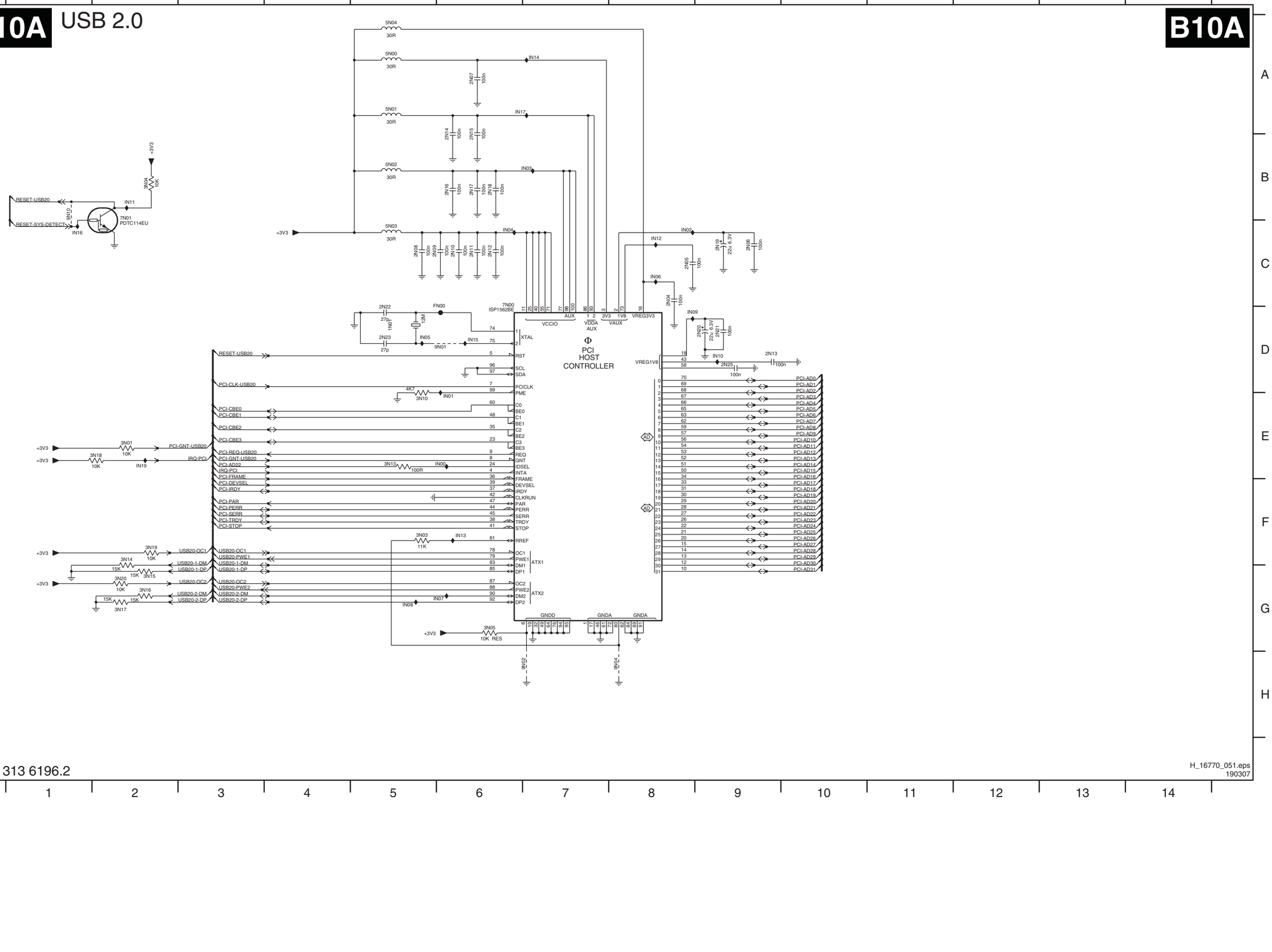
Personal Notes:

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SSB: USB 2.0

B10A USB 2.0

B10A



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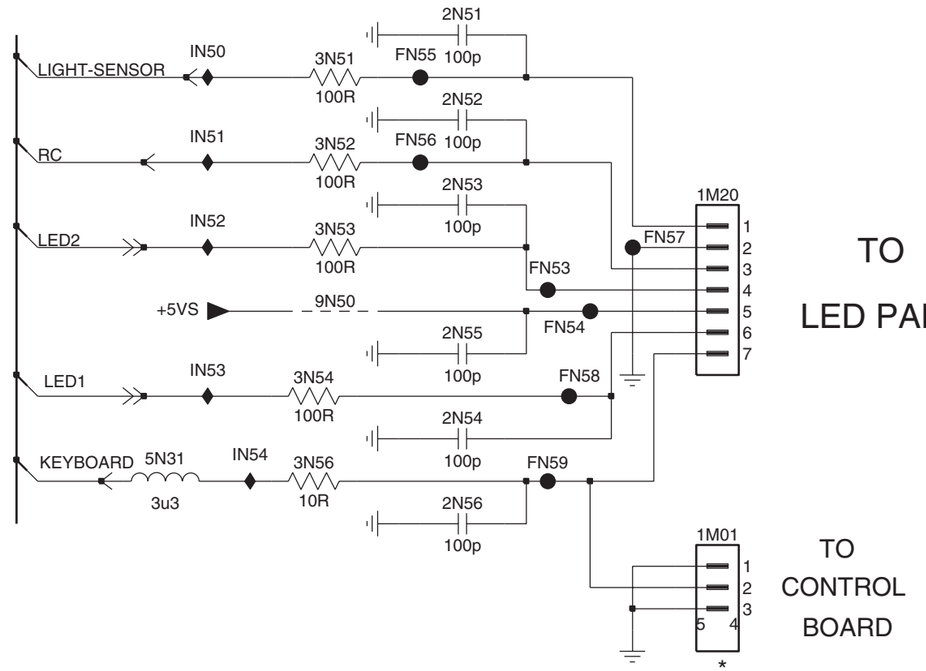
SSB: LED Panel Connector

1M01 C5 2N51 A4 2N53 B4 2N55 C4 3N51 B4 3N53 B4 3N56 C4 9N50 B4 FN54 C5 FN56 B4 FN58 C5 IN50 B3 IN52 B3 IN54 C4
1M20 B5 2N52 B4 2N54 C4 2N56 C4 3N52 B4 3N54 C4 5N31 C3 FN53 B5 FN55 B4 FN57 B5 FN59 C5 IN51 B3 IN53 C3

1 2 3 4 5 6 7

B10C LED PANEL CONNECTOR **B10C**

A B C D



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1 2 3 4 5 6 7

SSB: Audio Left / Right

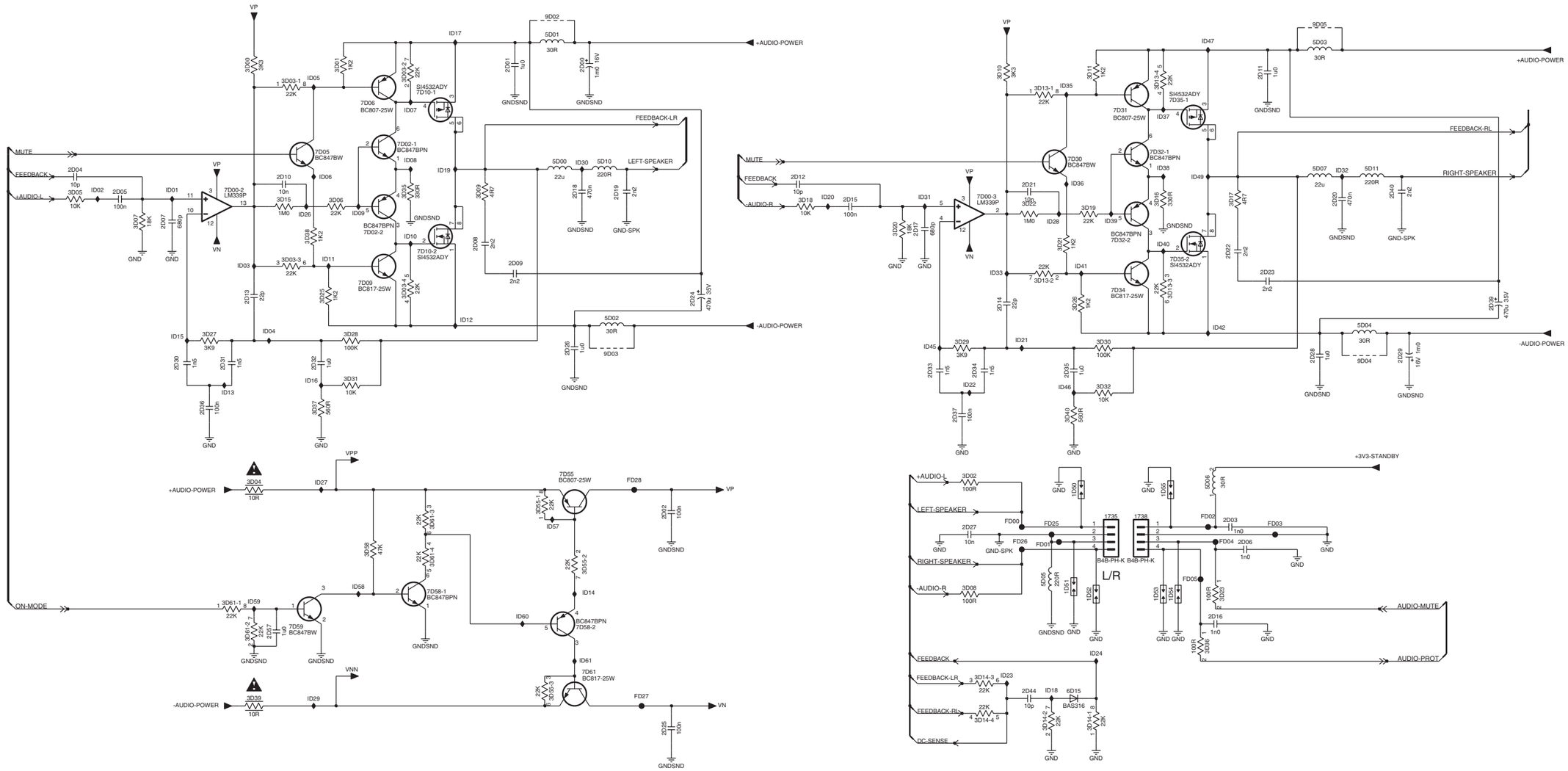
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1738 F12	2D00 B6	2D07 C2	2D14 D10	2D21 C10	2D28 D13	2D35 E11	3D00 B3	3D04 F3	3D11 B11	3D14-3 G10	3D20 C9	3D28 D4	3D37 E4	3D58 F4	5D02 D6	5D11 C14	7D06 B4	7D32-2 C11	7D59 G3	FD01 F11	FD27 H7	ID06 C4	ID13 E3	ID20 C9	ID28 C11	ID36 C11	ID45 D10	ID60 G6
1D50 F11	2D01 B6	2D08 C5	2D15 C9	2D22 C12	2D29 D14	2D36 E3	3D01 B4	3D05 C1	3D13-1 B11	3D14-4 H10	3D21 C11	3D29 D10	3D38 C4	3D61-1 G3	5D03 A13	6D15 H11	7D09 D4	7D34 D11	7D61 G6	FD02 F12	FD28 F7	ID07 B5	ID14 G6	ID21 D10	ID29 H4	ID37 B12	ID46 E11	ID61 G6
1D51 G11	2D02 F7	2D09 C6	2D16 G12	2D23 D13	2D30 D2	2D37 E10	3D02 F10	3D06 C4	3D13-2 D11	3D15 C3	3D22 C10	3D30 D11	3D39 H3	3D61-2 G3	5D04 D14	7D00-2 C3	7D10-1 B5	7D35-1 B12	9D02 A6	FD03 F13	ID01 C2	ID08 B5	ID15 D2	ID22 E10	ID30 C6	ID38 C12	ID47 A12	
1D52 G11	2D03 F12	2D10 C3	2D17 C9	2D24 D7	2D31 D3	2D39 D15	3D03-1 B3	3D07 C2	3D13-3 D12	3D16 C12	3D23 G12	3D31 E4	3D40 E11	3D61-3 F5	5D05 G11	7D00-3 C10	7D10-2 C5	7D35-2 C12	9D03 D6	FD04 F12	ID02 C2	ID09 C4	ID16 E4	ID23 G10	ID31 C9	ID39 C11	ID49 C14	
1D53 G12	2D04 C1	2D11 B13	2D18 C6	2D25 H7	2D32 D4	2D40 C14	3D03-2 B5	3D08 G10	3D13-4 B12	3D17 C12	3D25 D4	3D32 E11	3D55-1 F6	3D61-4 F5	5D06 F12	7D02-1 B4	7D30 C11	7D55 E6	9D04 D14	FD05 G12	ID03 D3	ID10 C5	ID17 A5	ID24 G11	ID32 C13	ID40 C12	ID57 F6	
1D54 G12	2D05 C2	2D12 C8	2D19 C7	2D26 D6	2D33 E10	2D44 H10	3D03-3 C3	3D09 C5	3D14-1 H11	3D18 C8	3D26 D11	3D35 C5	3D55-2 F6	5D00 C6	5D07 C13	7D02-2 C4	7D31 B11	7D58-1 G5	9D05 A13	FD25 F11	ID04 D3	ID11 C4	ID18 H11	ID26 C4	ID33 D10	ID41 D11	ID58 G4		

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

B11A AUDIO LEFT / RIGHT

B11A

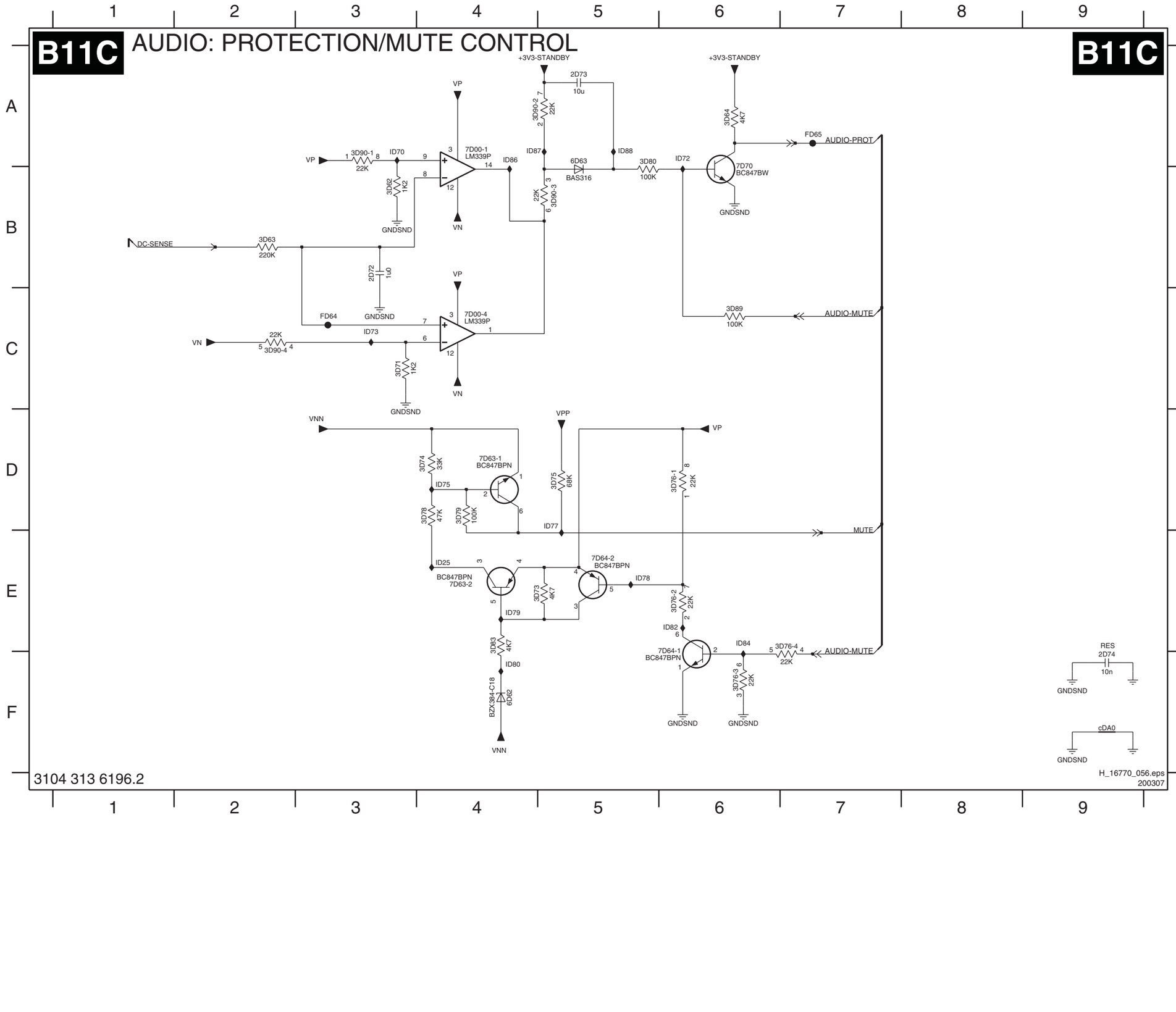
A B C D E F G H



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SSB: Audio Protection Mute Control



2D72 B3
2D73 A5
2D74 F9
3D62 B3
3D63 B2
3D64 A6
3D71 C3
3D73 E5
3D74 D4
3D75 D5
3D76-1 D6
3D76-2 E6
3D76-3 F6
3D76-4 E7
3D78 D4
3D79 D4
3D80 A5
3D83 E4
3D89 C6
3D90-1 A3
3D90-2 A4
3D90-3 B5
3D90-4 C2
6D62 F4
6D63 A5
7D00-1 A4
7D00-4 C4
7D63-1 D4
7D63-2 E4
7D64-1 F6
7D64-2 E5
7D70 B6
FD64 C3
FD65 A7
ID25 E4
ID70 A3
ID72 A6
ID73 C3
ID75 D4
ID77 D5
ID78 E5
ID79 E4
ID80 F4
ID82 E6
ID84 E6
ID86 A4
ID87 A4
ID88 A5
cDA0 F9

SSB: SRP List Explanation

Example

Net Name	*Diagram*
+12-15V	AP1 (4x)
+12-15V	AP4 (4x)
+12-15V	AP5 (12x)
+12-15V	AP6 (4x)
+12-15V	AP7 (8x)
+12V	AP1 (4x)
+12V_NF	AP1 (2x)
+12VAL	AP1 (2x)
+25VLP	AP1 (4x)
+25VLP	AP2 (1x)
+3V3-STANDBY	AP5 (3x)
+400V-F	AP1 (2x)
+400V-F	AP2 (2x)
+400V-F	AP3 (2x)
+5V2	AP1 (6x)
+5V2	AP2 (1x)
+5V2-NF	AP1 (1x)
+5V2-NF	AP2 (1x)
+5V-SW	AP1 (6x)
+5V-SW	AP2 (1x)
+8V6	AP1 (3x)
+AUX	AP1 (2x)
+AUX	AP2 (1x)
+DC-F	AP1 (2x)
+DC-F	AP3 (2x)
+SUB-SPEAKER	AP5 (1x)
+SUB-SPEAKER	AP6 (2x)
-12-15V	AP1 (4x)
-12-15V	AP4 (6x)
-12-15V	AP5 (14x)
-12-15V	AP6 (6x)
-12-15V	AP7 (8x)
AL-OFF	AP1 (2x)
AUDIO-L	AP4 (1x)
AUDIO-L	AP5 (1x)
AUDIO-PROT	AP5 (3x)
AUDIO-R	AP4 (1x)
AUDIO-R	AP5 (1x)
AUDIO-SW	AP5 (1x)
AUDIO-SW	AP7 (1x)
BOOST	AP1 (2x)
CPROT	AP4 (2x)
CPROT	AP5 (1x)
CPROT-SW	AP5 (1x)
CPROT-SW	AP6 (2x)
-DC-F	AP1 (2x)
-DC-F	AP3 (2x)
DC-PROT	AP1 (1x)
DC-PROT	AP5 (2x)
DIM-CONTROL	AP1 (2x)
FEEDBACK+SW	AP6 (2x)
FEEDBACK-L	AP4 (2x)
FEEDBACK-R	AP4 (2x)
FEEDBACK-SW	AP6 (2x)
GND-AL	AP1 (2x)
GNDHA	AP1 (40x)
GNDHA	AP2 (20x)
GNDHA	AP3 (2x)
GNDHOT	AP3 (2x)
GND-L	AP1 (2x)
GND-L	AP4 (4x)
GND-L	AP5 (34x)
GND-LL	AP4 (7x)
GND-LL	AP5 (1x)
GND-LR	AP4 (7x)
GND-LR	AP5 (1x)
GND-LSW	AP5 (1x)
GND-LSW	AP6 (15x)
GND-S	AP1 (11x)
GND-SA	AP4 (8x)
GND-SA	AP5 (2x)
GND-SA	AP6 (8x)
GND-SA	AP7 (6x)
GNDscrew	AP3 (2x)
GNDscrew	AP5 (2x)
GND-SSB	AP5 (3x)
GND-SSP	AP1 (51x)
GND-SSP	AP2 (15x)
IN+SW	AP6 (2x)
IN-L	AP4 (2x)
IN-R	AP4 (2x)
IN-SW	AP6 (2x)
INV-MUTE	AP4 (1x)
INV-MUTE	AP5 (1x)
INV-MUTE	AP6 (1x)
LEFT-SPEAKER	AP4 (1x)
LEFT-SPEAKER	AP5 (1x)
MUTE	AP4 (2x)
MUTE	AP5 (1x)
MUTE	AP6 (2x)
ON-OFF	AP1 (3x)
OUT	AP6 (1x)
OUT	AP7 (2x)
OUTN	AP6 (1x)
OUTN	AP7 (1x)
POWER-GOOD	AP1 (2x)
POWER-OK-PLATFORM	AP1 (2x)
RIGHT-SPEAKER	AP4 (1x)
RIGHT-SPEAKER	AP5 (1x)
SOUND-ENABLE	AP5 (3x)
STANDBY	AP1 (5x)
STANDBY	AP2 (1x)
-SUB-SPEAKER	AP5 (1x)
-SUB-SPEAKER	AP6 (2x)
V-CLAMP	AP1 (1x)
V-CLAMP	AP3 (2x)

1.1. Introduction

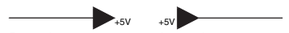
SRP (Service Reference Protocol) is a software tool that creates a list with all references to signal lines. The list contains references to the signals within all schematics of a PWB. It replaces the text references currently printed next to the signal names in the schematics. These printed references are created manually and are therefore not guaranteed to be 100% correct. In addition, in the current crowded schematics there is often none or very little place for these references.
Some of the PWB schematics will use SRP while others will still use the manual references. Either there will be an SRP reference list for a schematic, or there will be printed references in the schematic.

1.2. Non-SRP Schematics

There are several different signals available in a schematic:

1.2.1. Power Supply Lines

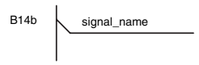
All power supply lines are available in the supply line overview (see chapter 6). In the schematics (see chapter 7) is not indicated where supplies are coming from or going to.
It is however indicated if a supply is incoming (created elsewhere), or outgoing (created or adapted in the current schematic).



Outgoing Incoming

1.2.2. Normal Signals

For normal signals, a schematic reference (e.g. B14b) is placed next to the signals.



1.2.3. Grounds

For normal and special grounds (e.g. GNDHOT or GND3V3 etc.), nothing is indicated.

1.3. SRP Schematics

SRP is a tool, which automatically creates a list with signal references, indicating on which schematic the signals are used.
A reference is created for all signals indicated with an SRP symbol, these symbols are:



Power supply line.



Stand alone signal or switching line (used as less as possible).



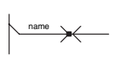
Signal line into a wire tree.



Switching line into a wire tree.



Bi-directional line (e.g. SDA) into a wire tree.



Signal line into a wire tree, its direction depends on the circuit (e.g. ingoing for PDP, outgoing for LCD sets).

Remarks:

- When there is a black dot on the "signal direction arrow" it is an SRP symbol, so there will be a reference to the signal name in the SRP list.
- All references to normal grounds (Ground symbols without additional text) are not listed in the reference list, this to keep it concise.
- Signals that are not used in multiple schematics, but only once or several times in the same schematic, are included in the SRP reference list, but only with one reference.

Additional Tip:

When using the PDF service manual file, you can very easily search for signal names and follow the signal over all the schematics. In Adobe PDF reader:

- Select the signal name you want to search for, with the "Select text" tool.
- Copy and paste the signal name in the "Search PDF" tool.
- Search for all occurrences of the signal name.
- Now you can quickly jump between the different occurrences and follow the signal over all schematics. It is advised to "zoom in" to e.g. 150% to see clearly, which text is selected. Then you can zoom out, to get an overview of the complete schematic.

PS. It is recommended to use at least Adobe PDF (reader) version 6.x, due to better search possibilities in this version.

E_06532_031.eps
230606

Personal Notes:

SSB: SRP List Part 1

Netname	Schematic
+12V	B02A (1x)
+12V	B02B (2x)
+12V	B02C (2x)
+12V	B04A (1x)
+12V	B06B (1x)
+12V	B08C (1x)
+12V	B09A (6x)
+12V-DISP	B01B (1x)
+12V-DISP	B04O (1x)
+12V-DISP	B06B (1x)
+12VF	B02A (1x)
+12VF	B02B (1x)
+12VF	B02C (1x)
+12VS	B01A (2x)
+12VS	B02A (1x)
+12VS	B02B (1x)
+1V2	B02A (6x)
+1V2	B03A (3x)
+1V2	B04E (1x)
+1V2	B04P (8x)
+1V2-FPGA	B05C (14x)
+1V2-PLL	B05C (9x)
+1V2-STAB	B05B (2x)
+1V2-STANDBY	B02A (1x)
+1V2-STANDBY	B02B (1x)
+1V2-STANDBY	B04P (1x)
+1V4	B02C (1x)
+1V4	B05B (2x)
+1V5	B06C (2x)
+1V5-P3	B06C (2x)
+1V5-PLL	B06C (2x)
+1V5-RX	B06C (2x)
+1V5-TX	B06C (2x)
+1V8	B02A (1x)
+1V8	B04G (7x)
+1V8	B04P (2x)
+1V8-PNX	B04P (3x)
+2V5	B02C (2x)
+2V5	B04A (1x)
+2V5	B05B (1x)
+2V5out-FPGA	B05C (2x)
+2V5-P3	B06C (2x)
+2V5-PF	B06C (4x)
+2V5-PLL	B06C (2x)
+2V5-STAB	B05B (2x)
+2V5-TUN	B03A (5x)
+3V3	B02A (1x)
+3V3	B03A (6x)
+3V3	B03B (1x)
+3V3	B04A (1x)
+3V3	B04E (1x)
+3V3	B04L (1x)
+3V3	B04M (2x)
+3V3	B04P (2x)
+3V3	B04Q (1x)
+3V3	B05B (4x)
+3V3	B05C (1x)
+3V3	B05D (1x)
+3V3	B06B (9x)
+3V3	B06C (6x)
+3V3	B08B (1x)
+3V3	B08C (1x)
+3V3	B08F (1x)
+3V3	B10A (7x)
+3V3-ANA	B08F (3x)
+3V3-ATSC	B03A (11x)
+3V3-DIG	B08F (2x)
+3V3F	B02A (2x)
+3V3F	B02C (1x)
+3V3-FPGA	B05B (4x)
+3V3-FPGA	B05C (6x)
+3V3-NAND	B04Q (5x)
+3V3-P3	B06C (7x)
+3V3-PER	B04E (4x)
+3V3-PER	B04F (4x)
+3V3-PER	B04K (2x)
+3V3-PER	B04N (1x)
+3V3-PER	B04P (7x)
+3V3-SD1	B05D (3x)
+3V3-STANDBY	B02B (1x)
+3V3-STANDBY	B04A (17x)
+3V3-STANDBY	B04B (2x)
+3V3-STANDBY	B04C (2x)
+3V3-STANDBY	B04D (3x)
+3V3-STANDBY	B04E (2x)
+3V3-STANDBY	B04M (1x)
+3V3-STANDBY	B04P (1x)
+3V3-STANDBY	B06B (3x)
+3V3-STANDBY	B08A (2x)
+3V3-STANDBY	B08C (2x)
+3V3-STANDBY	B11A (1x)
+3V3-STANDBY	B11C (2x)
+3V3-UART	B08C (2x)
+5V-CON	B08D (3x)
+5V-CON	B08F (1x)
+5V-MUX	B08F (2x)
+5V-ON	B01B (1x)
+5V-ON	B02B (1x)
+5V-ON	B03A (1x)
+5V-ON	B03B (2x)
+5V-ON	B04A (1x)
+5V-ON	B06B (5x)
+5V-ON	B06C (1x)
+5V-ON	B10B (1x)
+5V-POD	B01B (1x)
+5V-POD	B02A (1x)
+5V-POD	B02B (1x)
+5V-POD	B10B (1x)
+5VS	B02B (1x)
+5VS	B04C (2x)
+5VS	B04D (1x)
+5VS	B04L (1x)
+5VS	B04M (1x)
+5VS	B08D (1x)
+5VS	B09A (1x)
+5VS	B10C (1x)
+5V-STANDBY	B01A (2x)
+5V-STANDBY	B02B (2x)
+5V-STANDBY	B06B (2x)
+8V2-PAS	B06B (2x)
+AUDIO-L	B04I (1x)
+AUDIO-L	B11A (2x)
+AUDIO-POWER	B01A (2x)
+AUDIO-POWER	B11A (3x)
+Vin-FPGA	B05C (2x)
+VTUN	B02B (2x)
4-MHz	B03B (2x)
ADAC(1)	B04I (1x)
ADAC(1)	B04L (1x)
ADAC(2)	B04I (1x)
ADAC(2)	B04L (1x)
ADAC(3)	B04L (1x)
ADAC(3)	B04M (1x)
ADAC(4)	B04L (1x)
ADAC(4)	B04M (1x)
ADAC(5)	B04I (1x)
ADAC(5)	B04L (1x)
ADAC(6)	B04I (1x)
ADAC(6)	B04L (1x)
ADAC(7)	B04I (1x)
ADAC(7)	B04L (3x)
ADAC(8)	B04I (1x)
ADAC(8)	B04L (3x)
AIN-5V	B08D (3x)
ALE	B04A (2x)
ALE	B04B (1x)
A-PLOP	B04M (1x)
A-PLOP	B08C (2x)
A-PLOP-HDPH	B04M (2x)
ARX0-	B08D (1x)
ARX0-	B08F (1x)
ARX0+	B08D (1x)
ARX0+	B08F (1x)
ARX1-	B08D (1x)
ARX1-	B08F (1x)
ARX1+	B08D (1x)
ARX1+	B08F (1x)
ARX2-	B08D (1x)
ARX2-	B08F (1x)
ARX2+	B08D (1x)
ARX2+	B08F (1x)
ARXC-	B08D (1x)
ARXC-	B08F (1x)
ARXC+	B08D (1x)
ARXC+	B08F (1x)
ARX-DDC-SCL	B08D (2x)
ARX-DDC-SDA	B08D (2x)
ARX-HOTPLUG	B08D (2x)
ASDO	B05B (1x)
ASDO	B05C (1x)
AUDIO-CL-L	B04I (1x)
AUDIO-CL-R	B04I (1x)
AUDIO-HDPH-L-AP	B04M (1x)
AUDIO-HDPH-L-AP	B09B (1x)
AUDIO-HDPH-R-AP	B04M (1x)
AUDIO-HDPH-R-AP	B09B (1x)
AUDIO-IN1-L	B04L (1x)
AUDIO-IN1-L	B09A (2x)
AUDIO-IN1-R	B04L (1x)
AUDIO-IN1-R	B09A (2x)
AUDIO-IN2-L	B04L (1x)
AUDIO-IN2-L	B09A (1x)
AUDIO-IN2-R	B04L (1x)
AUDIO-IN2-R	B09A (1x)
AUDIO-IN3-L	B04L (1x)
AUDIO-IN3-L	B09A (1x)
AUDIO-IN3-R	B04L (1x)
AUDIO-IN3-R	B09A (1x)
AUDIO-IN4-L	B04L (1x)
AUDIO-IN4-L	B08C (1x)
AUDIO-IN4-R	B04L (1x)
AUDIO-IN4-R	B08C (1x)
AUDIO-IN5-L	B04L (1x)
AUDIO-IN5-L	B09B (1x)
AUDIO-IN5-R	B04L (1x)
AUDIO-IN5-R	B09B (1x)
AUDIO-MUTE	B04A (1x)
AUDIO-MUTE	B11A (1x)
AUDIO-MUTE	B11C (2x)
AUDIO-OUT-L	B04I (1x)
AUDIO-OUT-L	B08C (1x)
AUDIO-OUT-R	B04I (1x)
AUDIO-OUT-R	B08C (1x)
-AUDIO-POWER	B01A (2x)
-AUDIO-POWER	B11A (3x)
AUDIO-PROT	B01A (1x)
AUDIO-PROT	B11A (1x)
AUDIO-PROT	B11C (1x)
-AUDIO-R	B04I (1x)
-AUDIO-R	B11A (2x)
AUDIO-RESET	B04A (1x)
AUDIO-RESET	B04B (1x)
AUDIO-RESET	B04M (1x)
AUDIO-VDD	B04I (7x)
AUDIO-VEE	B04I (7x)
AV1_C	B04K (1x)
AV1_C	B09A (1x)
AV1_PB	B04K (1x)
AV1_PB	B09A (1x)
AV1_PR	B04K (1x)
AV1_PR	B09A (1x)
AV1_Y	B04K (1x)
AV1_Y	B09A (1x)
AV1_Y-CVBS	B04K (1x)
AV1_Y-CVBS	B09A (1x)
AV1-BLK	B04B (1x)
AV1-BLK	B09A (1x)
AV1-STATUS	B04A (1x)
AV2_Y-CVBS	B04K (1x)
AV2_Y-CVBS	B09A (1x)
AV2-BLK	B04A (2x)
AV2-STATUS	B04A (1x)
AV3_PB	B04K (1x)
AV3_PB	B09A (1x)
AV3_PR	B04K (1x)
AV3_PR	B09A (1x)
AV3_Y	B04K (1x)
AV3_Y	B09A (1x)
AV4_PB	B04K (1x)
AV4_PR	B04K (1x)
AV4_Y	B04K (1x)
BACKLIGHT-BOOST	B01B (1x)
BACKLIGHT-BOOST	B06B (1x)
BACKLIGHT-CONTROL	B06B (1x)
BACKLIGHT-CONTROL	B06C (1x)
BACKLIGHT-OUT	B01B (1x)
BACKLIGHT-OUT	B06B (2x)
BIN-5V	B08D (3x)
BOLT-ON-IO	B04A (2x)
BOLT-ON-IO	B09A (1x)
BRX0-	B08D (1x)
BRX0-	B08F (1x)
BRX0+	B08D (1x)
BRX0+	B08F (1x)
BRX1-	B08D (1x)
BRX1-	B08F (1x)
BRX1+	B08D (1x)
BRX1+	B08F (1x)
BRX2-	B08D (1x)
BRX2-	B08F (1x)
BRX2+	B08D (1x)
BRX2+	B08F (1x)
BRXC-	B08D (1x)
BRXC-	B08F (1x)
BRXC+	B08D (1x)
BRXC+	B08F (1x)
BRX-DDC-SCL	B08D (2x)
BRX-DDC-SDA	B08D (2x)
BRX-HOTPLUG	B08D (2x)
B-VGA	B04K (1x)
CA-ADDEN	B04N (1x)
CA-CD1	B04N (1x)
CA-CD2	B04N (1x)
CA-CTRLEN_BOOTMODE	B04E (2x)
CA-DATADIR	B04N (1x)
CA-DATAEN	B04N (1x)
CA-INT	B04E (1x)
CA-MDI0	B04N (1x)
CA-MDI1	B04N (1x)
CA-MDI2	B04N (1x)
CA-MDI3	B04N (1x)
CA-MDI4	B04N (1x)
CA-MDI5	B04N (1x)
CA-MDI6	B04N (1x)
CA-MDI7	B04N (1x)
CA-MDO0	B04N (1x)
CA-MDO1	B04N (1x)
CA-MDO2	B04N (1x)
CA-MDO3	B04N (1x)
CA-MDO4	B04N (1x)
CA-MDO5	B04N (1x)
CA-MDO6	B04N (1x)
CA-MDO7	B04N (1x)
CA-MICLK	B04N (1x)
CA-MISTRT	B04N (1x)
CA-MIVAL	B04N (1x)
CA-MOCLK_VS2	B04N (1x)
CA-MOSTRT	B04N (1x)
CA-MOVAL	B04N (1x)
CA-OOBEN	B04N (1x)
CA-RST	B04N (1x)
CA-VCCEN	B04N (1x)
CA-VPPEN	B04N (1x)
CA-VS1	B04N (1x)
CEC-HDMI	B04A (2x)
CEC-HDMI	B04H (1x)
CEC-HDMI	B08D (1x)
CIN-5V	B08D (3x)
C-MON-OUT	B04K (1x)
C-MON-OUT	B09B (1x)
CONF-DONE	B05B (1x)
CONF-DONE	B05C (1x)
CRX0-	B08D (1x)
CRX0-	B08F (1x)
CRX0+	B08D (1x)
CRX0+	B08F (1x)
CRX1-	B08D (1x)
CRX1-	B08F (1x)
CRX1+	B08D (1x)
CRX1+	B08F (1x)
CRX2-	B08D (1x)
CRX2-	B08F (1x)
CRX2+	B08D (1x)
CRX2+	B08F (1x)
CRXC-	B08D (1x)
CRXC-	B08F (1x)
CRXC+	B08D (1x)
CRXC+	B08F (1x)
CRX-DDC-SCL	B08D (2x)
CRX-DDC-SDA	B08D (2x)
CRX-HOTPLUG	B08D (2x)
CTRL1-FPGA	B05C (1x)
CTRL1-FPGA	B06B (1x)
CTRL1-MIPS_LCD-PWR-ON	B04E (1x)
CTRL1-MIPS_LCD-PWR-ON	B06B (2x)
CTRL1-STBY_LAMP-ON	B04B (1x)
CTRL1-STBY_LAMP-ON	B06B (2x)
CTRL2-FPGA	B05C (1x)
CTRL2-FPGA	B06B (1x)
CTRL2-STBY_BACKLIGHT-CTRL_RESET-P3	B04A (2x)
CTRL2-STBY_BACKLIGHT-CTRL_RESET-P3	B06B (2x)
CTRL2-STBY_BACKLIGHT-CTRL_RESET-P3	B06C (1x)
CTRL3-FPGA	B05C (1x)
CTRL3-FPGA	B06B (1x)
CTRL3-STBY_POWER-OK-DISP	B04A (1x)
CTRL3-STBY_POWER-OK-DISP	B04B (1x)
CTRL3-STBY_POWER-OK-DISP	B06B (1x)
CTRL4-FPGA	B05C (1x)
CTRL4-FPGA	B06B (1x)
CTRL4-P3	B06B (1x)
CTRL4-P3	B06C (2x)
CTRL4-STBY_SELECT-PWM-ANA	B04B (1x)
CTRL4-STBY_SELECT-PWM-ANA	B06B (2x)
CTRL5-STBY_BACKLIGHT-BOOST	B04A (2x)
CTRL5-STBY_BACKLIGHT-BOOST	B06B (2x)
CTRL-DISP1	B06A (1x)
CTRL-DISP1	B06B (1x)
CTRL-DISP2	B06A (1x)
CTRL-DISP2	B06B (1x)
CTRL-DISP3	B06A (1x)
CTRL-DISP3	B06B (1x)
CTRL-DISP4	B06A (1x)
CTRL-DISP4	B06B (1x)
CVBS4	B03B (1x)
CVBS4	B04K (1x)
DATA0	B05B (1x)
DATA0	B05C (1x)
DCLK	B05B (1x)
DCLK	B05C (1x)
DC-SENSE	B11A (1x)
DC-SENSE	B11C (1x)
DDC-SCL	B04H (1x)
DDC-SCL	B08F (1x)
DDC-SDA	B04H (1x)
DDC-SDA	B08F (1x)
DDR2-A0	B04G (4x)
DDR2-A1	B04G (4x)
DDR2-A10	B04G (4x)
DDR2-A11	B04G (4x)
DDR2-A12	B04G (4x)
DDR2-A2	B04G (4x)
DDR2-A3	B04G (4x)
DDR2-A4	B04G (4x)
DDR2-A5	B04G (4x)
DDR2-A6	B04G (4x)
DDR2-A7	B04G (4x)
DDR2-A8	B04G (4x)
DDR2-A9	B04G (4x)
DDR2-BA0	B04G (4x)
DDR2-BA1	B04G (4x)
DDR2-CAS	B04G (4x)
DDR2-CKE	B04G (4x)
DDR2-CLK_N	B04G (4x)
DDR2-CLK_P	B04G (4x)
DDR2-CS	B04G (4x)
DDR2-D0	B04G (2x)
DDR2-D1	B04G (2x)
DDR2-D10	B04G (2x)
DDR2-D11	B04G (2x)
DDR2-D12	B04G (2x)
DDR2-D13	B04G (2x)
DDR2-D14	B04G (2x)
DDR2-D15	B04G (2x)
DDR2-D16	B04G (2x)
DDR2-D17	B04G (2x)
DDR2-D18	B04G (2x)
DDR2-D19	B04G (2x)
DDR2-D2	B04G (2x)
DDR2-D20	B04G (2x)
DDR2-D21	B04G (2x)
DDR2-D22	B04G (2x)
DDR2-D23	B04G (2x)
DDR2-D24	B04G (2x)
DDR2-D25	B04G (2x)
DDR2-D26	B04G (2x)
DDR2-D27	B04G (2x)
DDR2-D28	B04G (2x)
DDR2-D29	B04G (2x)
DDR2-D3	B04G (2x)
DDR2-D30	B04G (2x)
DDR2-D31	B04G (2x)
DDR2-D4	B04G (2x)
DDR2-D5	B04G (2x)
DDR2-D6	B04G (2x)
DDR2-D7	B04G (2x)
DDR2-D8	B04G (2x)
DDR2-D9	B04G (2x)
DDR2-DQM0	B04G (2x)
DDR2-DQM1	B04G (2x)
DDR2-DQM2	B04G (2x)
DDR2-DQM3	B04G (2x)
DDR2-DQS0_N	B04G (3x)
DDR2-DQS0_P	B04G (2x)
DDR2-DQS1_N	B04G (3x)
DDR2-DQS1_P	B04G (2x)
DDR2-DQS2_N	B04G (3x)
DDR2-DQS2_P	B04G (2x)
DDR2-DQS3_N	B04G (3x)
DDR2-DQS3_P	B04G (2x)
DDR2-ODT	B04G (4x)
DDR2-RAS	B04G (4x)
DDR2-VREF-CTRL	B04G (2x)
DDR2-VREF-DDR	B04G (3x)
DDR2-WE	B04G (4x)
DETECT-1V2-2V5-3V3	B04A (6x)
DETECT-5V-12V	B04A (1x)
DETECT-5V-12V	B04B (1x)
DV-B0_UART2-RX	B04O (1x)
DV-B0_UART2-RX	B05C (1x)
DV-B0_UART2-RX	B08C (1x)
DV-B0_UART2-RX	B09A (1x)
DV-B1_UART2-TX	B04O (1x)
DV-B1_UART2-TX	B05C (1x)
DV-B1_UART2-TX	B08C (1x)
DV-B1_UART2-TX	B09A (1x)
DV-B2_DEBUG-BREAK	B04B (1x)
DV-B2_DEBUG-BREAK	B04O (1x)
DV-B2_DEBUG-BREAK	B05C (1x)
DV-B3_AUDIO-MUTE	B04A (1x)
DV-B3_AUDIO-MUTE	B04O (1x)
DV-B3_AUDIO-MUTE	B05C (1x)
DV-B4_UV0	B04O (1x)
DV-B4_UV0	B05C (1x)
DV-B5_UV1	B04O (1x)
DV-B5_UV1	B05C (1x)
DV-B6_Y0	B04O (1x)
DV-B6_Y0	B05C (1x)
DV-B7_Y1	B04O (1x)
DV-B7_Y1	B05C (1x)
DV-CLK	B04O (1x)
DV-CLK	B05C (1x)
DV-CLK-PLL	B05C (3x)
DV-FF_DE	B04O (1x)
DV-FF_DE	B05C (1x)
DV-G0_UV2	B04O (1x)
DV-G0_UV2	B05C (1x)
DV-G1_UV3	B04O (1x)
DV-G1_UV3	B05C (1x)
DV-G2_UV4	B04O (1x)
DV-G2_UV4	B05C (1x)
DV-G3_UV5	B04O (1x)
DV-G3_UV5	B05C (1x)
DV-G4_UV6	B04O (1x)
DV-G4_UV6	B05C (1x)
DV-G5_UV7	B04O (1x)
DV-G5_UV7	B05C (1x)
DV-G6_UV8	B04O (1x)
DV-G6_UV8	B05C (1x)
DV-G7_UV9	B04O (1x)
DV-G7_UV9	B05C (1x)
DV-HS	B04O (1x)
DV-HS	B05C (1x)
DV-R0_Y2	B04O (1x)
DV-R0_Y2	B05C (1x)
DV-R1_Y3	B04O (1x)
DV-R1_Y3	B05C (1x)
DV-R2_Y4	B04O (1x)
DV-R2_Y4	B05C (1x)
DV-R3_Y5	B04O (1x)
DV-R3_Y5	B05C (1x)
DV-R4_Y6	B04O (1x)
DV-R4_Y6	B05C (1x)
DV-R5_Y7	B04O (1x)
DV-R5_Y7	B05C (1x)
DV-R6_Y8	B04O (1x)
DV-R6_Y8	B05C (1x)
DV-R7_Y9	B04O (1x)
DV-R7_Y9	B05C (1x)
DV-VS	B04O (1x)
DV-VS	B05C (1x)
EA	B04A (2x)
EA	B04B (1x)
EJTAG-DETECT	B03A (1x)
EJTAG-DETECT	B04B (1x)
EJTAG-TCK	B03A (1x)
EJTAG-TCK	B04E (1x)
EJTAG-TDI	B03A (1x)
EJTAG-TDI	B04E (1x)
EJTAG-TDO	B03A (1x)
EJTAG-TDO	B04E (1x)
EJTAG-TMS	B03A (1x)
EJTAG-TMS	B04E (1x)
EJTAG-TRSTN	B03A (1x)
EJTAG-TRSTN	B04E (1x)
ENABLE-1V2	B04B (6x)
ENABLE-3V3	B02A (1x)
ENABLE-3V3	B04B (1x)
FE-CLK	B03A (1x)
FE-CLK	B04N (1x)
FE-DATA0	B03A (1x)
FE-DATA0	B04N (1x)
FE-DATA1	B03A (1x)
FE-DATA1	B04N (1x)
FE-DATA2	B03A (1x)
FE-DATA2	B04N (1x)
FE-DATA3	B03A (1x)
FE-DATA3	B04N (1x)
FE-DATA4	B03A (1x)
FE-DATA4	B04N (1x)
FE-DATA5	B03A (1x)
FE-DATA5	B04N (1x)
FE-DATA6	B03A (1x)
FE-DATA6	B04N (1x)
FE-DATA7	B03A (1x)
FE-DATA7	B04N (1x)
FEEDBACK	B11A (3x)
FEEDBACK-LR	B11A (2x)
FEEDBACK-RL	B11A (2x)
FE-ERR	B03A (1x)
FE-ERR	B04N (2x)
FE-SOP	B03A (1x)
FE-SOP	B04N (1x)
FE-VALID	B03A (1x)
FE-VALID	B04N (1x)
FM-TRAP-SWITCH	B03A (1x)
FM-TRAP-SWITCH	B03B (1x)
FRONT_C	B04K (1x)
FRONT_C	B09B (1x)
FRONT_Y-CVBS	B04K (1x)
FRONT_Y-CVBS	B09B (1x)
GND1V4	B02C (7x)
GNDP	B01A (9x)
GND-RX	B06C (5x)
GND-SIG	B02A (15x)
GNDSND	B01A (1x)
GNDSND	B11A (16x)
GNDSND	B11C (8x)
GND-SPK	B11A (3x)
GND-TX	B06C (6x)
GNDV	B01A (7x)
G-VGA	B04K (1x)
HOT-PLUG	B04H (1x)
HOT-PLUG	B08D (3x)
H-SYNC-VGA	B04K (1x)
IF-FILTN1	B03B (1x)
IF-FILTP1	B03B (1x)
IF-N	B03B (1x)
IF-N	B04K (1x)
IF-OUT	B03B (2x)
IF-P	B03B (1x)
IF-P	B04K (1x)
IRQ-PCI	B04E (1x)
IRQ-PCI	B10A (2x)
IRQ-PNX5050	B08B (1x)
JTAG-TCK	B03A (1x)
JTAG-TCK	B06C (1x)
JTAG-TD-CON-PACIFIC	B06C (2x)
JTAG-TD-PACIFIC-PNX5050	B05B (1x)
JTAG-TD-PACIFIC-PNX5050	B06C (2x)
JTAG-TD-PNX5050-PNX8535	B04E (1x)
JTAG-TD-PNX5050-PNX8535	B05B (1x)
JTAG-TD-PNX8535-FE	B03A (1x)
JTAG-TD-PNX8535-FE	B04E (1x)
JTAG-TMS	B03A (1x)
JTAG-TMS	B06C (1x)
JTAG-TRST	B06C (1x)
KEYBOARD	B04A (2x)
KEYBOARD	B10C (1x)
LAMP-ON-OUT	B01B (1x)
LAMP-ON-OUT	B06B (1x)
LED1	B04A (1x)
LED1	B10C (1x)
LED1-3V3	B04A (1x)
LED1-3V3	B04B (1x)
LED2	B04A (1x)
LED2	B10C (1x)
LED2-3V3	B04A (3x)
LEFT-SPEAKER	B11A (2x)
LIGHT-SENSOR	B04A (1x)
LIGHT-SENSOR	B10C (1x)
MP-LED1	B05B (1x)
MP-LED1	B05C (1x)
MP-LED2	B05B (1x)
MP-LED2	B05C (1x)
MP-LED3	B05B (1x)
MP-LED3	B05C (1x)
MP-LED4	B05B (1x)
MP-LED4	B05C (1x)
MP-LED5	B05B (1x)
MP-LED5	B05C (1x)
MSEL1	B05C (2x)
MUTE	B11A (2x)
MUTE	B11C (1x)
NAND-AD(0)	B04Q (2x)
NAND-AD(1)	B04Q (2x)
NAND-AD(2)	B04Q (2x)
NAND-AD(3)	B04Q (2x)
NAND-AD(4)	B04Q (2x)
NAND-AD(5)	B04Q (2x)
NAND-AD(6)	B04Q (2x)
NAND-AD(7)	B04Q (2x)
NAND-ALE	B04Q (2x)
NAND-CLE	B04Q (2x)
NAND-REn	B04Q (2x)
NAND-WEn	B04Q (2x)
nCONFIG	B05B (1x)
nCONFIG	B05C (1x)
nCSO	B05B (1x)
nCSO	B05C (1x)
ON-MODE	B02B (1x)
ON-MODE	B04B (1x)
ON-MODE	B04D (1x)
ON-MODE	B05B (1x)
ON-MODE	B06B (1x)
ON-MODE	B11A (1x)
OVP	B02A (1x)
OVP	B02C (1x)
P0.0	B04A (2x)
P0.0	B04B (1x)
P0.1	B04A (2x)
P0.1	B04B (1x)
P0.2	B04A (2x)
P0.2	B04B (1x)
P0.3	B04A (2x)
P0.3	B04B (1x)
P0.4	B04A (2x)
P0.4	B04B (1x)
P0.5	B04A (2x)
P0.5	B04B (1x)
P0.6	B04A (2x)
P0.6	B04B (1x)
P0.7	B04A (2x)
P0.7	B04B (1x)
P2.0	B04A (2x)
P2.0	B04B (1x)
P2.1	B04A (2x)
P2.1	B04B (1x)
P2.2	B04A (2x)
P2.2	B04B (1x)
P2.3	B04A (2x)
P2.3	B04B (1x)
P2.4	B04A (2x)
P2.4	B04B (1x)
P2.5	B04A (2x)
P2.5	B04B (1x)
P2.6	B04A (2x)
P2.6	B04B (1x)
P2.7	B04A (2x)
P2.7	B04B (1x)
P3-VS	B06B (1x)
P3-VS	B06C (1x)

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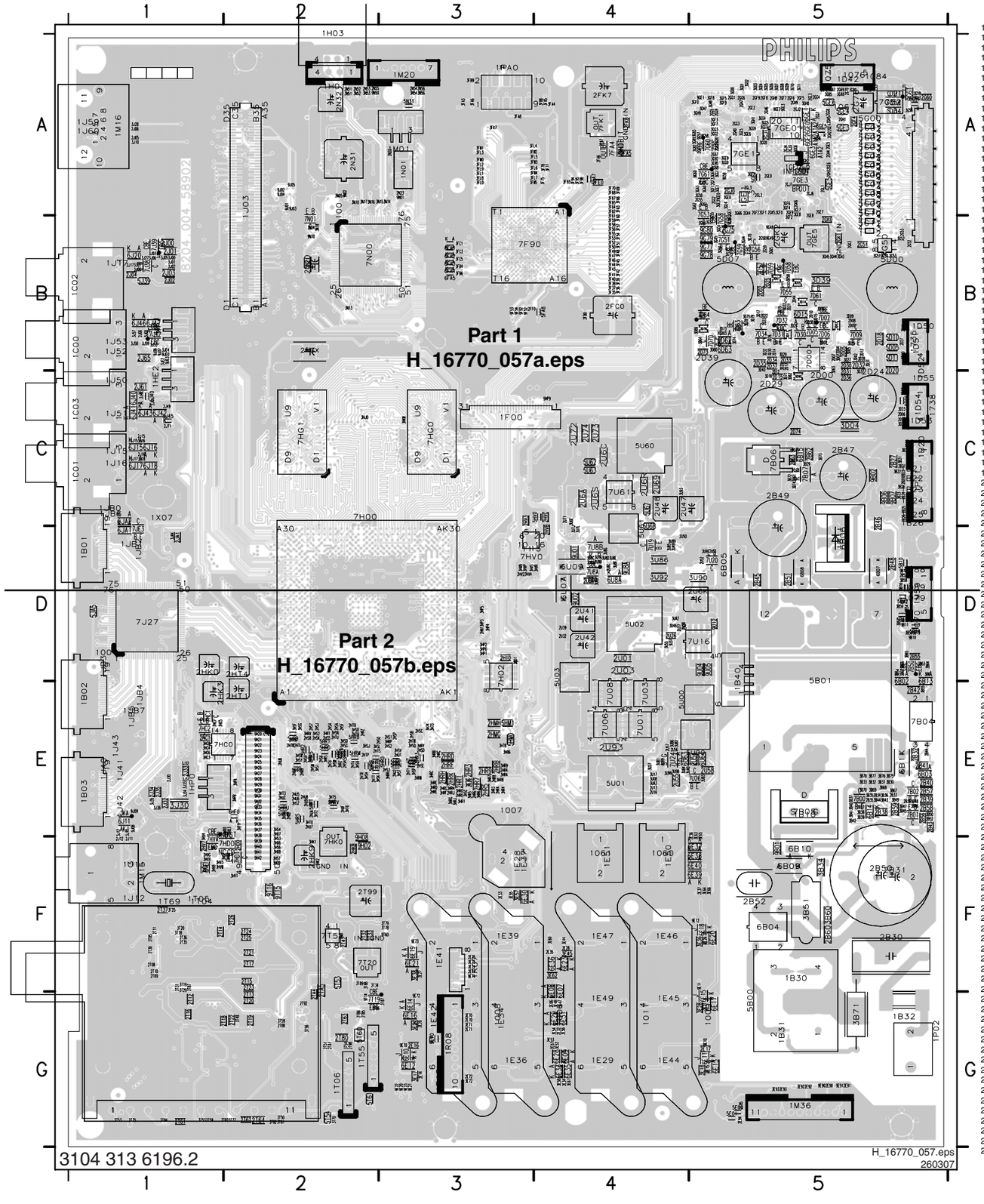
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SSB: SRP List Part 2

Netname	Schematic
PARX-DDC-SCL	B08D (1x)
PARX-DDC-SCL	B08F (1x)
PARX-DDC-SDA	B08D (1x)
PARX-DDC-SDA	B08F (1x)
PBRX-DDC-SCL	B08D (1x)
PBRX-DDC-SCL	B08F (1x)
PBRX-DDC-SDA	B08D (1x)
PBRX-DDC-SDA	B08F (1x)
PCEC-HDMI	B08D (4x)
PCI-AD0	B04F (1x)
PCI-AD0	B04Q (1x)
PCI-AD0	B08E (1x)
PCI-AD0	B10A (1x)
PCI-AD1	B04F (1x)
PCI-AD1	B04Q (1x)
PCI-AD1	B08E (1x)
PCI-AD1	B10A (1x)
PCI-AD10	B04F (1x)
PCI-AD10	B08E (1x)
PCI-AD10	B10A (1x)
PCI-AD11	B04F (1x)
PCI-AD11	B08E (1x)
PCI-AD11	B10A (1x)
PCI-AD12	B04F (1x)
PCI-AD12	B08E (1x)
PCI-AD12	B10A (1x)
PCI-AD13	B04F (1x)
PCI-AD13	B08E (1x)
PCI-AD13	B10A (1x)
PCI-AD14	B04F (1x)
PCI-AD14	B08E (1x)
PCI-AD14	B10A (1x)
PCI-AD15	B04F (1x)
PCI-AD15	B08E (1x)
PCI-AD15	B10A (1x)
PCI-AD16	B04F (1x)
PCI-AD16	B08E (1x)
PCI-AD16	B10A (1x)
PCI-AD17	B04F (1x)
PCI-AD17	B08E (1x)
PCI-AD17	B10A (1x)
PCI-AD18	B04F (1x)
PCI-AD18	B08E (1x)
PCI-AD18	B10A (1x)
PCI-AD19	B04F (1x)
PCI-AD19	B08E (1x)
PCI-AD19	B10A (1x)
PCI-AD2	B04F (1x)
PCI-AD2	B08E (1x)
PCI-AD2	B10A (1x)
PCI-AD20	B04F (1x)
PCI-AD20	B08E (1x)
PCI-AD20	B10A (1x)
PCI-AD21	B04F (1x)
PCI-AD21	B08E (1x)
PCI-AD21	B10A (1x)
PCI-AD22	B04F (1x)
PCI-AD22	B08E (1x)
PCI-AD22	B10A (2x)
PCI-AD23	B04F (1x)
PCI-AD23	B08E (1x)
PCI-AD23	B10A (1x)
PCI-AD24	B04F (2x)
PCI-AD24	B04Q (1x)
PCI-AD24	B08E (1x)
PCI-AD24	B10A (1x)
PCI-AD25	B04F (1x)
PCI-AD25	B04Q (1x)
PCI-AD25	B08E (1x)
PCI-AD25	B10A (1x)
PCI-AD26	B04F (1x)
PCI-AD26	B04Q (1x)
PCI-AD26	B08E (1x)
PCI-AD26	B10A (1x)
PCI-AD27	B04F (1x)
PCI-AD27	B04Q (1x)
PCI-AD27	B08E (1x)
PCI-AD27	B10A (1x)
PCI-AD28	B04F (1x)
PCI-AD28	B04Q (1x)
PCI-AD28	B08E (1x)
PCI-AD28	B10A (1x)
PCI-AD29	B04F (1x)
PCI-AD29	B04Q (1x)
PCI-AD29	B08E (1x)
PCI-AD29	B10A (1x)
PCI-AD3	B04F (1x)
PCI-AD3	B08E (1x)
PCI-AD3	B10A (1x)
PCI-AD30	B04F (1x)
PCI-AD30	B04Q (1x)
PCI-AD30	B08E (1x)
PCI-AD30	B10A (1x)
PCI-AD31	B04F (1x)
PCI-AD31	B04Q (1x)
PCI-AD31	B08E (1x)
PCI-AD31	B10A (1x)
PCI-AD4	B04F (1x)
PCI-AD4	B08E (1x)
PCI-AD4	B10A (1x)
PCI-AD5	B04F (1x)
PCI-AD5	B08E (1x)
PCI-AD5	B10A (1x)
PCI-AD6	B04F (1x)
PCI-AD6	B08E (1x)
PCI-AD6	B10A (1x)
PCI-AD7	B04F (1x)
PCI-AD7	B08E (1x)
PCI-AD7	B10A (1x)
PCI-AD8	B04F (1x)
PCI-AD8	B08E (1x)
PCI-AD8	B10A (1x)
PCI-AD9	B04F (1x)
PCI-AD9	B08E (1x)
PCI-AD9	B10A (1x)
PCI-CBE0	B04F (1x)
PCI-CBE0	B08E (1x)
PCI-CBE0	B10A (1x)
PCI-CBE1	B04F (1x)
PCI-CBE1	B04Q (1x)
PCI-CBE1	B08E (1x)
PCI-CBE1	B10A (1x)
PCI-CBE2	B04F (1x)
PCI-CBE2	B04Q (1x)
PCI-CBE2	B08E (1x)
PCI-CBE2	B10A (1x)
PCI-CBE3	B04F (1x)
PCI-CBE3	B08E (1x)
PCI-CBE3	B10A (1x)
PCI-CLK-DEBUG	B04E (2x)
PCI-CLK-DEBUG	B08E (1x)
PCI-CLK-OUT	B04E (3x)
PCI-CLK-PNX5050_CLK-MOP	B04E (2x)
PCI-CLK-PNX5050_CLK-MOP	B05C (1x)
PCI-CLK-PNX8535	B04E (2x)
PCI-CLK-PNX8535	B04F (1x)
PCI-CLK-USB20	B04E (2x)
PCI-CLK-USB20	B10A (1x)
PCI-DEVSEL	B04F (2x)
PCI-DEVSEL	B08E (1x)
PCI-DEVSEL	B10A (1x)
PCI-FRAME	B04F (2x)
PCI-FRAME	B08E (1x)
PCI-FRAME	B10A (1x)
PCI-GNT	B04F (2x)
PCI-GNT-B	B04F (2x)
PCI-GNT-DEBUG	B08B (1x)
PCI-GNT-PNX5050	B08B (1x)
PCI-GNT-PNX8535	B04F (1x)
PCI-GNT-PNX8535	B08B (2x)
PCI-GNT-PNX8535	B08E (1x)
PCI-GNT-USB20	B04F (1x)
PCI-GNT-USB20	B10A (2x)
PCI-INTA-OUT	B04F (1x)
PCI-INTA-OUT	B08B (1x)
PCI-INTA-OUT	B08E (1x)
PCI-IRDY	B04F (2x)
PCI-IRDY	B08E (1x)
PCI-IRDY	B10A (1x)
PCI-PAR	B04F (1x)
PCI-PAR	B08E (1x)
PCI-PAR	B10A (1x)
PCI-PERR	B04F (2x)
PCI-PERR	B08E (1x)
PCI-PERR	B10A (1x)
PCI-REQ	B04F (2x)
PCI-REQ-B	B04F (2x)
PCI-REQ-DEBUG	B08B (1x)
PCI-REQ-PNX5050	B08B (1x)
PCI-REQ-PNX8535	B04F (1x)
PCI-REQ-PNX8535	B08B (2x)
PCI-REQ-PNX8535	B08E (1x)
PCI-REQ-USB20	B04F (1x)
PCI-REQ-USB20	B10A (1x)
PCI-SERR	B04F (2x)
PCI-SERR	B08E (1x)
PCI-SERR	B10A (1x)
PCI-STOP	B04F (2x)
PCI-STOP	B08E (1x)
PCI-STOP	B10A (1x)
PCI-TRDY	B04F (2x)
PCI-TRDY	B08E (1x)
PCI-TRDY	B10A (1x)
PCRX-DDC-SCL	B08D (1x)
PCRX-DDC-SCL	B08F (1x)
PCRX-DDC-SDA	B08D (1x)
PCRX-DDC-SDA	B08F (1x)
POD-MODE	B02A (1x)
POD-MODE	B02B (1x)
POD-MODE	B04B (1x)
POD-MODE	B04D (1x)
POD-MODE	B06B (1x)
POWER-OK-DISPLAY	B01B (1x)
POWER-OK-DISPLAY	B04A (1x)
PROT-DC	B02A (1x)
PROT-DC	B02C (2x)
PSEN	B04A (2x)
PSEN	B04B (1x)
PWM-3	B06C (2x)
PWM-OR	B06C (2x)
RC	B04A (2x)
RC	B10C (1x)
REGIMBEAU_CVBS-SWITCH	B04B (1x)
REGIMBEAU_CVBS-SWITCH	B09B (1x)
RESET-NVM_WP-NANDFLASH	B04B (1x)
RESET-NVM_WP-NANDFLASH	B04C (1x)
RESET-NVM_WP-NANDFLASH	B04Q (1x)
RESET-NVM_WP-NANDFLASH-INV	B04Q (2x)
RESET-STBY	B04B (1x)
RESET-STBY	B04D (1x)
RESET-STBY-J	B04A (1x)
RESET-STBY-J	B04B (1x)
RESET-SYS-DETECT	B03A (1x)
RESET-SYS-DETECT	B04A (2x)
RESET-SYS-DETECT	B04E (2x)
RESET-SYS-DETECT	B08F (1x)
RESET-SYS-DETECT	B10A (1x)
RESET-USB20	B10A (2x)
RIGHT-SPEAKER	B11A (2x)
RREF-PNX8535	B04H (1x)
RREF-PNX8535	B04P (2x)
R-VGA	B04K (1x)
RX0-	B04H (1x)
RX0-	B08F (1x)
RX0+	B04H (1x)
RX0+	B08F (1x)
RX1-	B04H (1x)
RX1-	B08F (1x)
RX1+	B04H (1x)
RX1+	B08F (1x)
RX2-	B04H (1x)
RX2-	B08F (1x)
RX2+	B04H (1x)
RX2+	B08F (1x)
RXC-	B04H (1x)
RXC-	B08F (1x)
RXC+	B04H (1x)
RXC+	B08F (1x)
RXD	B04C (1x)
RXD	B08A (1x)
RXD	B08C (1x)
RXD2	B08C (1x)
RXD2	B09A (1x)
RXD-MIPS	B04C (1x)
RXD-MIPS	B04E (1x)
RXD-SERV	B08A (1x)
RXD-SERV	B08C (1x)
RXD-UP	B04A (2x)
RXD-UP	B04C (1x)
RxP3CLK	B06C (1x)
RxP3eA-_G7	B05A (1x)
RxP3eA-_G7	B06A (1x)
RxP3eA-_G7	B06C (1x)
RxP3eA+_G6	B05A (1x)
RxP3eA+_G6	B06A (1x)
RxP3eA+_G6	B06C (1x)
RxP3eB-_G5	B05A (1x)
RxP3eB-_G5	B06A (1x)
RxP3eB-_G5	B06C (1x)
RxP3eB+_G4	B05A (1x)
RxP3eB+_G4	B06A (1x)
RxP3eB+_G4	B06C (1x)
RxP3eC-_G3	B05A (1x)
RxP3eC-_G3	B06A (1x)
RxP3eC-_G3	B06C (1x)
RxP3eC+_G2	B05A (1x)
RxP3eC+_G2	B06A (1x)
RxP3eC+_G2	B06C (1x)
RxP3eCLK-_G0	B05A (1x)
RxP3eCLK-_G0	B06A (1x)
RxP3eCLK-_G0	B06C (1x)
RxP3eCLK+_G1	B05A (1x)
RxP3eCLK+_G1	B06A (1x)
RxP3eCLK+_G1	B06C (1x)
RxP3eD-_R9	B05A (1x)
RxP3eD-_R9	B06A (1x)
RxP3eD-_R9	B06C (1x)
RxP3eD+_R8	B05A (1x)
RxP3eD+_R8	B06A (1x)
RxP3eD+_R8	B06C (1x)
RxP3eE-_R7	B05A (1x)
RxP3eE-_R7	B06A (1x)
RxP3eE-_R7	B06C (1x)
RxP3eE+_R6	B05A (1x)
RxP3eE+_R6	B06A (1x)
RxP3eE+_R6	B06C (1x)
RxP3FF	B06C (1x)
RxP3HS_DE	B06C (1x)
RxP3oA-_B9	B05A (2x)
RxP3oA-_B9	B06A (1x)
RxP3oA-_B9	B06C (1x)
RxP3oA+_B8	B05A (2x)
RxP3oA+_B8	B06A (1x)
RxP3oA+_B8	B06C (1x)
RxP3oB-_B7	B05A (2x)
RxP3oB-_B7	B06A (1x)
RxP3oB-_B7	B06C (1x)
RxP3oB+_B6	B05A (2x)
RxP3oB+_B6	B06A (1x)
RxP3oB+_B6	B06C (1x)
RxP3oC-_B5	B05A (2x)
RxP3oC-_B5	B06A (1x)
RxP3oC-_B5	B06C (1x)
RxP3oC+_B4	B05A (2x)
RxP3oC+_B4	B06A (1x)
RxP3oC+_B4	B06C (1x)
RxP3oCLK-_B2	B05A (2x)
RxP3oCLK-_B2	B06A (1x)
RxP3oCLK-_B2	B06C (1x)
RxP3oCLK+_B3	B05A (2x)
RxP3oCLK+_B3	B06A (1x)
RxP3oCLK+_B3	B06C (1x)
RxP3oD-_B1	B05A (2x)
RxP3oD-_B1	B06A (1x)
RxP3oD-_B1	B06C (1x)
RxP3oD+_B0	B05A (2x)
RxP3oD+_B0	B06A (1x)
RxP3oD+_B0	B06C (1x)
RxP3oE-_G9	B05A (2x)
RxP3oE-_G9	B06A (1x)
RxP3oE-_G9	B06C (1x)
RxP3oE+_G8	B05A (2x)
RxP3oE+_G8	B06A (1x)
RxP3oE+_G8	B06C (1x)
RxP3R0	B06C (1x)
RxP3R1	B06C (1x)
RxP3R2	B06C (1x)
RxP3R3	B06C (1x)
RxP3R4	B06C (1x)
RxP3R5	B06C (1x)
RxP3VS	B06C (1x)
SCL1	B04E (2x)
SCL2	B04E (2x)
SCL-2	B04E (2x)
SCL3	B04E (2x)
SCL-AMBI	B01B (1x)
SCL-AMBI	B06B (2x)
SCL-AMBI-3V3	B05C (1x)
SCL-AMBI-3V3	B06B (1x)
SCL-AMBI-3V3	B06C (1x)
SCL-I2C4-DISP	B06A (1x)
SCL-I2C4-DISP	B06B (2x)
SCL-MUX2-BUF	B03B (2x)
SCL-SLAVE	B04E (2x)
SCL-SSB	B03A (1x)
SCL-SSB	B04E (4x)
SCL-SSB	B05C (1x)
SCL-SSB	B06C (1x)
SCL-SSB	B08F (1x)
SCL-SSB1	B03A (1x)
SCL-SSB1	B03B (1x)
SCL-SSB-MUX1	B04E (2x)
SCL-SSB-MUX1	B06B (1x)
SCL-SSB-MUX2	B03B (1x)
SCL-SSB-MUX2	B04E (2x)
SCL-UP-MIPS	B04A (3x)
SCL-UP-MIPS	B04C (1x)
SCL-UP-MIPS	B04E (2x)
SD1-A0	B05C (1x)
SD1-A0	B05D (1x)
SD1-A1	B05C (1x)
SD1-A1	B05D (1x)
SD1-A10	B05C (1x)
SD1-A10	B05D (1x)
SD1-A11	B05C (1x)
SD1-A11	B05D (1x)
SD1-A2	B05C (1x)
SD1-A2	B05D (1x)
SD1-A3	B05C (1x)
SD1-A3	B05D (1x)
SD1-A4	B05C (1x)
SD1-A4	B05D (1x)
SD1-A5	B05C (1x)
SD1-A5	B05D (1x)
SD1-A6	B05C (1x)
SD1-A6	B05D (1x)
SD1-A7	B05C (1x)
SD1-A7	B05D (1x)
SD1-A8	B05C (1x)
SD1-A8	B05D (1x)
SD1-A9	B05C (1x)
SD1-A9	B05D (1x)
SD1-CAS	B05C (1x)
SD1-CAS	B05D (1x)
SD1-CKE	B05C (1x)
SD1-CKE	B05D (1x)
SD1-CLK	B05C (1x)
SD1-CLK	B05D (1x)
SD1-CS	B05C (1x)
SD1-CS	B05D (1x)
SD1-DQ1	B05C (1x)
SD1-DQ1	B05D (1x)
SD1-DQ10	B05C (1x)
SD1-DQ10	B05D (1x)
SD1-DQ11	B05C (1x)
SD1-DQ11	B05D (1x)
SD1-DQ12	B05C (1x)
SD1-DQ12	B05D (1x)
SD1-DQ13	B05C (1x)
SD1-DQ13	B05D (1x)
SD1-DQ14	B05C (1x)
SD1-DQ14	B05D (1x)
SD1-DQ15	B05C (1x)
SD1-DQ15	B05D (1x)
SD1-DQ16	B05C (1x)
SD1-DQ16	B05D (1x)
SD1-DQ2	B05C (1x)
SD1-DQ2	B05D (1x)
SD1-DQ3	B05C (1x)
SD1-DQ3	B05D (1x)
SD1-DQ4	B05C (1x)
SD1-DQ4	B05D (1x)
SD1-DQ5	B05C (1x)
SD1-DQ5	B05D (1x)
SD1-DQ6	B05C (1x)
SD1-DQ6	B05D (1x)
SD1-DQ7	B05C (1x)
SD1-DQ7	B05D (1x)
SD1-DQ8	B05C (1x)
SD1-DQ8	B05D (1x)
SD1-DQ9	B05C (1x)
SD1-DQ9	B05D (1x)
SD1-DQM	B05C (1x)
SD1-DQM	B05D (1x)
SD1-RAS	B05C (1x)
SD1-RAS	B05D (1x)
SD1-WE	B05C (1x)
SD1-WE	B05D (1x)
SDA1	B04E (2x)
SDA2	B04E (2x)
SDA-2	B04E (2x)
SDA3	B04E (2x)
SDA-AMBI	B01B (1x)
SDA-AMBI	B06B (2x)
SDA-AMBI-3V3	B05C (1x)
SDA-AMBI-3V3	B06B (1x)
SDA-AMBI-3V3	B06C (1x)
SDA-I2C4-DISP	B06A (1x)
SDA-I2C4-DISP	B06B (2x)
SDA-MUX2-BUF	B03B (2x)
SDA-SLAVE	B04E (2x)
SDA-SSB	B03A (1x)
SDA-SSB	B04E (4x)
SDA-SSB	B05C (1x)
SDA-SSB	B06C (1x)
SDA-SSB	B08F (1x)
SDA-SSB1	B03A (1x)
SDA-SSB1	B03B (1x)
SDA-SSB-MUX1	B04E (2x)
SDA-SSB-MUX1	B06B (1x)
SDA-SSB-MUX2	B03B (1x)
SDA-SSB-MUX2	B04E (2x)
SDA-UP-MIPS	B04A (3x)
SDA-UP-MIPS	B04C (1x)
SDA-UP-MIPS	B04E (2x)
SDM	B04A (3x)
SENSE+1V2-PNX8535	B04A (4x)
SENSE+1V2-PNX8535	B04P (4x)
SENSE+1V4	B04A (1x)
SENSE+1V4	B05B (1x)
SENSE+1V8	B04P (4x)
SPDIF-IN1	B04L (1x)
SPDIF-IN1	B08B (1x)
SPDIF-OUT	B04L (1x)
SPDIF-OUT	B08B (1x)
SPI	B08B (1x)
SPI	B08C (1x)
SPI-CLK	B04A (2x)
SPI-CSB	B04A (2x)
SPI-OUT	B08B (1x)
SPI-OUT	B08C (1x)
SPI-PROG	B04A (3x)
SPI-SDI	B04A (3x)
SPI-SDO	B04A (2x)
SPI-WP	B04A (3x)
STANDBY	B01B (1x)
STANDBY	B04D (1x)
SUPPLY-FAULT	B02A (1x)
SUPPLY-FAULT	B02C (1x)
SUPPLY-FAULT	B04A (2x)
TCK	B05B (1x)
TCK	B05C (1x)
TDA-IF-AGC	B03A (1x)
TDA-IF-AGC	B03B (1x)
TDA-IF-IN-N	B03A (1x)
TDA-IF-IN-N	B03B (1x)
TDA-IF-IN-P	B03A (1x)
TDA-IF-IN-P	B03B (1x)
TDI	B05B (1x)
TDI	B05C (1x)
TDO	B05B (1x)
TDO	B05C (1x)
TMS	B05B (1x)
TMS	B05C (1x)
TUN-AGC	B03B (2x)
TUN-AGC-MON	B03A (1x)
TUN-AGC-MON	B03B (1x)
TUN-TDA-SCL	B03A (1x)
TUN-TDA-SCL	B03B (1x)
TUN-TDA-SDA	B03A (1x)
TUN-TDA-SDA	B03B (1x)
Tx8535oA-	B04O (2x)
Tx8535oA-	B05A (1x)
Tx8535oA+	B04O (2x)
Tx8535oA+	B05A (1x)
Tx8535oB-	B04O (2x)
Tx8535oB-	B05A (1x)
Tx8535oB+	B04O (2x)
Tx8535oB+	B05A (1x)
Tx8535oC-	B04O (2x)
Tx8535oC-	B05A (1x)
Tx8535oC+	B04O (2x)
Tx8535oC+	B05A (1x)
Tx8535oCLK-	B04O (2x)
Tx8535oCLK-	B05A (1x)
Tx8535oCLK+	B04O (2x)
Tx8535oCLK+	B05A (1x)
Tx8535oD-	B04O (2x)
Tx8535oD-	B05A (1x)
Tx8535oD+	B04O (2x)
Tx8535oD+	B05A (1x)
Tx8535oE-	B04O (2x)
Tx8535oE-	B05A (1x)
Tx8535oE+	B04O (2x)
Tx8535oE+	B05A (1x)
TXD	B04C (1x)
TXD	B08A (1x)
TXD	B08C (1x)
TXD2	B08C (1x)
TXD2	B09A (1x)
TXD-MIPS	B04C (1x)
TXD-MIPS	B04E (1x)
TXD-SERV	B08A (1x)
TXD-SERV	B08C (1x)
TXD-UP	B04A (2x)
TXD-UP	B04C (1x)
TXEA-	B06A (1x)
TXEA-	B06C (1x)
TXEA+	B06A (1x)
TXEA+	B06C (1x)
TXEB-	B06A (1x)
TXEB-	B06C (1x)
TXEB+	B06A (1x)
TXEB+	B06C (1x)
TXEC-	B06A (1x)
TXEC-	B06C (1x)
TXEC+	B06A (1x)
TXEC+	B06C (1x)
TXECLK-	B06A (1x)
TXECLK-	B06C (1x)
TXECLK+	B06A (1x)
TXECLK+	B06C (1x)
TXED-	B06A (1x)
TXED+	B06A (1x)
TXED+	B06C (1x)
TXEE-	B06A (1x)
TXEE-	B06C (1x)
TXEE+	B06A (1x)
TXEE+	B06C (1x)
TxFPGAeA-	B05A (1x)
TxFPGAeA-	B05C (1x)
TxFPGAeA+	B05A (1x)
TxFPGAeA+	B05C (1x)
TxFPGAeB-	B05A (1x)
TxFPGAeB-	B05C (1x)
TxFPGAeB+	B05A (1x)
TxFPGAeB+	B05C (1x)
TxFPGAeC-	B05A (1x)
TxFPGAeC-	B05C (1x)
TxFPGAeC+	B05A (1x)
TxFPGAeC+	B05C (1x)
TxFPGAeCLK-	B05A (1x)
TxFPGAeCLK-	B05C (1x)
TxFPGAeCLK+	B05A (1x)
TxFPGAeCLK+	B05C (1x)
TxFPGAeD-	B05A (1x)
TxFPGAeD-	B05C (1x)
TxFPGAeD+	B05A (1x)
TxFPGAeD+	B05C (1x)
TxFPGAeE-	B05A (1x)
TxFPGAeE-	B05C (1x)
TxFPGAeE+	B05A (1x)
TxFPGAeE+	B05C (1x)
TxFPGAoA-	B05A (1x)
TxFPGAoA-	B05C (1x)
TxFPGAoA+	B05A (1x)
TxFPGAoA+	B05C (1x)
TxFPGAoB-	B05A (1x)
TxFPGAoB-	B05C (1x)
TxFPGAoB+	B05A (1x)
TxFPGAoB+	B05C (1x)
TxFPGAoC-	B05A (1x)
TxFPGAoC-	B05C (1x)
TxFPGAoC+	B05A (1x)
TxFPGAoC+	B05C (1x)
TxFPGAoCLK-	B05A (1x)
TxFPGAoCLK-	B05C (1x)
TxFPGAoCLK+	B05A (1x)
TxFPGAoCLK+	B05C (1x)
TxFPGAoD-	B05A (1x)
TxFPGAoD-	B05C (1x)
TxFPGAoD+	B05A (1x)
TxFPGAoD+	B05C (1x)
TxFPGAoE-	B05A (1x)
TxFPGAoE-	B05C (1x)
TxFPGAoE+	B05A (1x)
TxFPGAoE+	B05C (1x)
TXOA-	B06A (1x)
TXOA-	B06C (1x)
TXOA+	B06A (1x)
TXOA+	B06C (1x)
TXOB-	B06A (1x)
TXOB-	B06C (1x)
TXOB+	B06A (1x)
TXOB+	B06C (1x)
TXOC-	B06A (1x)
TXOC-	B06C (1x)
TXOC+	B06A (1x)
TXOC+	B06C (1x)
TXOCLK-	B06A (1x)
TXOCLK-	B06C (1x)
TXOCLK+	B06A (1x)
TXOCLK+	B06C (1x)
TXOD-	B06A (1x)
TXOD-	B06C (1x)
TXOD+	B06A (1x)
TXOD+	B06C (1x)
TXOE-	B06A (1x)
TXOE-	B06C (1x)
TXOE+	B06A (1x)
TXOE+	B06C (1x)
UART-SWITCH	B04B (1x)
UART-SWITCH	B04C (1x)
UART-SWITCH	B08C (1x)
UART-SWITCHn	B04C (2x)
USB20-1-DM	B10A (2x)
USB20-1-DM	B10B (1x)
USB20-1-DP	B10A (2x)
USB20-1-DP	B10B (1x)
USB20-2-DM	B10A (2x)
USB20-2-DP	B10A (2x)
USB20-OC1	B10A (2x)
USB20-OC1	B10B (1x)
USB20-OC2	B10A (2x)
USB20-OC2	B10B (1x)
USB20-PWE1	B10A (1x)
USB20-PWE1	B10B (1x)
USB20-PWE2	B10A (1x)
USB20-PWE2	B10B (1x)
V1	B03B (2x)
V2	B03B (2x)
VDDA-ADC	B04P (2x)
VDDA-AUDIO	B04L (2x)
VDDA-AUDIO	B04P (2x)
VDDA-DAC	B04P (2x)
VDDA-LVDS	B04O (1x)
VDDA-LVDS	B04P (2x)
VDISP	B06A (1x)
VDISP	B06B (1x)
VN	B02B (4x)
VN	B04I (2x)
VN	B11A (6x)
VN	B11C (6x)
VNN	B11A (1x)
VNN	B11C (2x)
VP	B02B (4x)
VP	B04I (2x)
VP	B11A (10x)
VP	B11C (8x)
VPP	B11A (1x)
VPP	B11C (1x)
VSW	B02A (1x)
VSW	B02B (1x)
V-SYNC-VGA	B04K (1x)
VTT-TERM-DDR	B04G (2x)
XIO-ACK	B04F (1x)
XIO-ACK	B04Q (2x)
XIO-AD25	B04F (1x)
XIO-SEL-NAND	B04F (1x)
XIO-SEL-NAND	B04Q (2x)
Y-CVBS-MON-OUT	B04K (1x)
Y-CVBS-MONOUT	B08C (2x)
Y-CVBS-MON-OUT	B08C (1x)
Y-CVBS-MON-OUT_SC	B08C (2x)

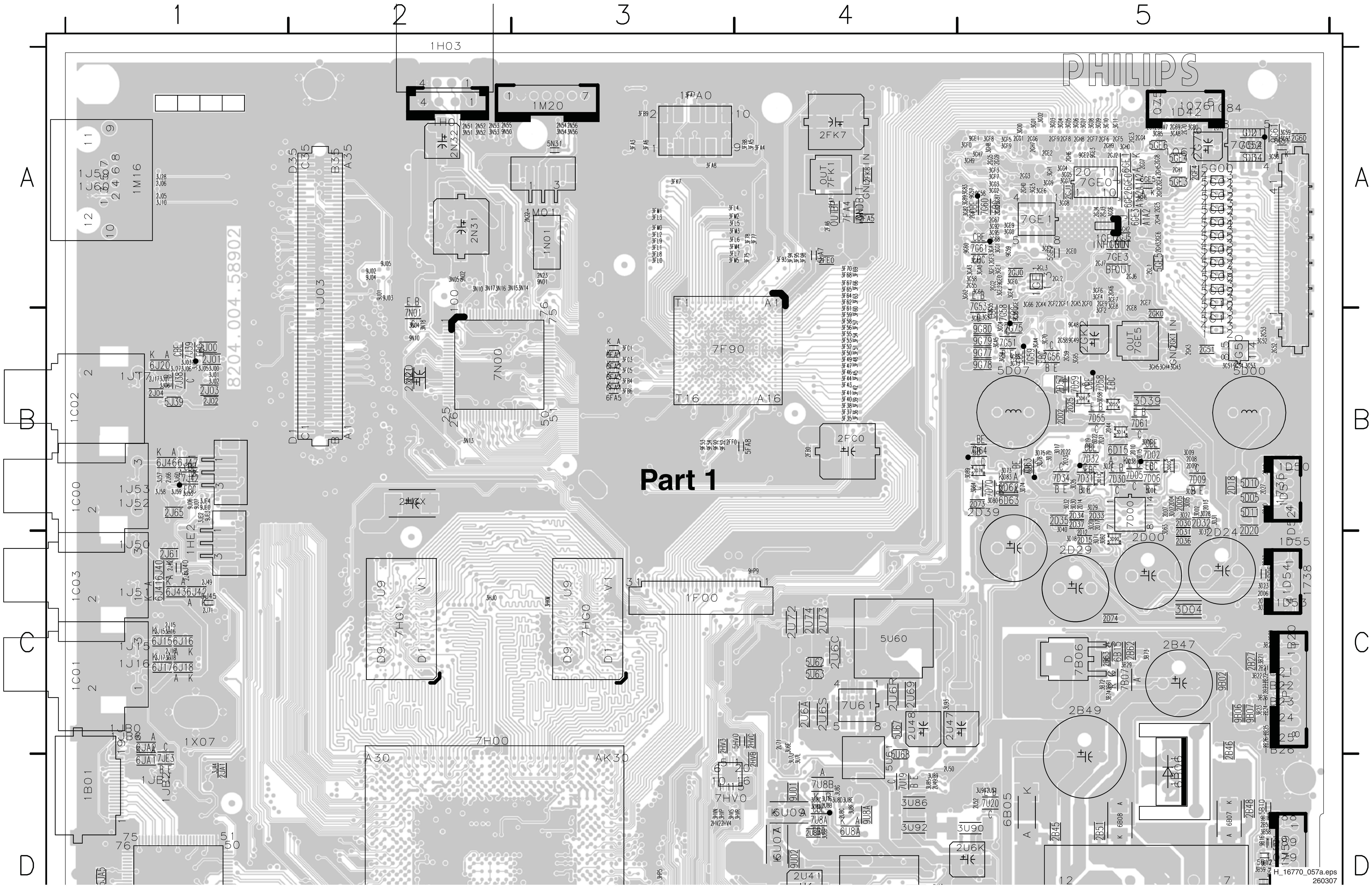
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Layout Small Signal Board (Overview Top Side)

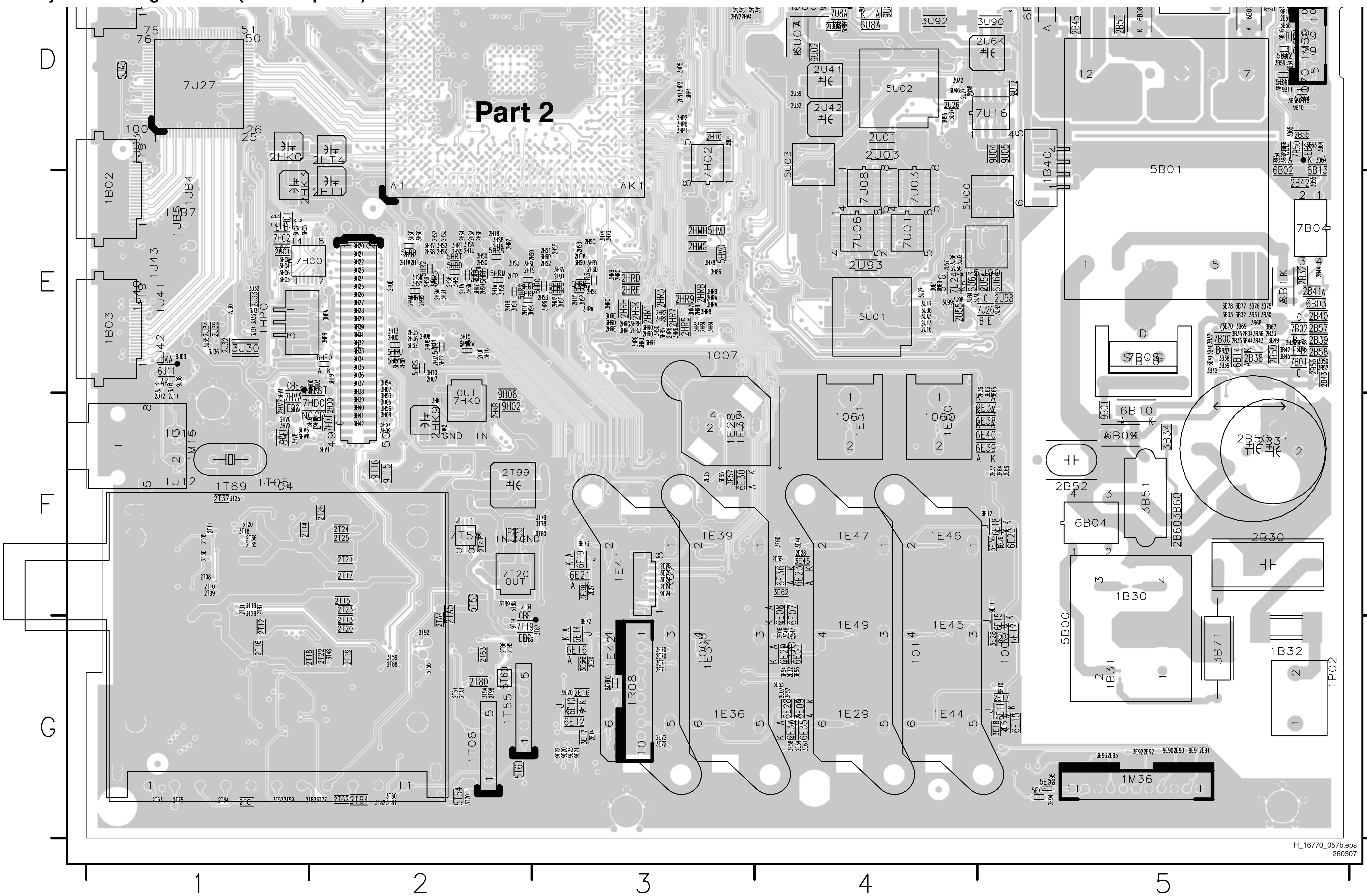


1006	G3	2D29	C5	2GJ3	A5	2J05	A1	2U72	C4	3E27	G3	3G10	A5	3HR1	E3	3N56	A3	5HRP	E3	7D05	B5	9H02	F2
1007	E3	2D30	B5	2GJ4	A5	2J06	A1	2U73	C4	3E28	G5	3G11	A5	3HR2	E3	3T18	F1	5HRR	E2	7D06	B5	9H05	E2
1008	G3	2D31	C5	2GJ5	A5	2J11	F1	2U74	C4	3E36	F5	3G51	B5	3HR3	E3	3T19	F1	5HRS	E2	7D09	B5	9H08	F2
1009	G5	2D32	B5	2GJ6	A5	2J12	F1	2U8A	D4	3E38	F3	3G52	B5	3HR4	E3	3T20	F1	5HRT	E2	7D30	B5	9H20	E2
1011	G4	2D33	B5	2GJ7	A5	2J15	C1	2U8B	D4	3E44	F4	3G53	B5	3HR5	E3	3T25	F1	5HRU	E2	7D31	B5	9H21	E2
1060	F4	2D34	B5	2GK0	B5	2J16	C1	2U8C	D4	3E45	F4	3G54	B5	3HR6	E3	3T29	F1	5HRV	E2	7D32	B5	9H22	E2
1061	F4	2D35	B5	2GK1	B5	2J17	B1	2U93	E4	3E47	G4	3G55	B5	3HR7	E3	3T48	G2	5HRW	E2	7D34	B5	9H23	E2
1735	B5	2D36	C5	2GK2	B5	2J30	E1	3B20	C5	3E48	G4	3G56	A5	3HR8	E3	3T50	G2	5HV0	C4	7D55	B5	9H24	E2
1738	C5	2D37	B5	2GK3	B5	2J32	E1	3B21	C5	3E52	G4	3G57	B5	3HR9	E3	3T53	G1	5J39	B1	7D58	B5	9H25	E2
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2D22	B5	2GH8	A5	2J00	B1	2U6C	C4	3D83	B5	3G05	A5	3HP4	D3	3N18	B2	5HRH	E2	7B06	C5	9G80	B5		
2D23	B5	2GH9	A5	2J01	B1	2U6K	D4	3D89	B5	3G06	A5	3HP5	D3	3N51	A2	5HRJ	E3	7B07	C5	9GE0	A5		
2D24	C5	2GJ0	A5	2J02	B1	2U6R	C4	3D90	C5	3G07	A5	3HPA	E2	3N52	A2	5HRK	E3	7B50	D5	9GE1	A5		
2D25	B5	2GJ1	A5	2J03	B1	2U6S	C4	3E17	G3	3G08	A5	3HPB	E2	3N53	A2	5HRM	E2	7D00	C5	9GE2	A5		
2D27	B5	2GJ2	A5	2J04	B1	2U71	C4	3E18	G5	3G09	A5	3HR0	E3	3N54	A3	5HRN	E3	7D02	B5	9GE3	A5		

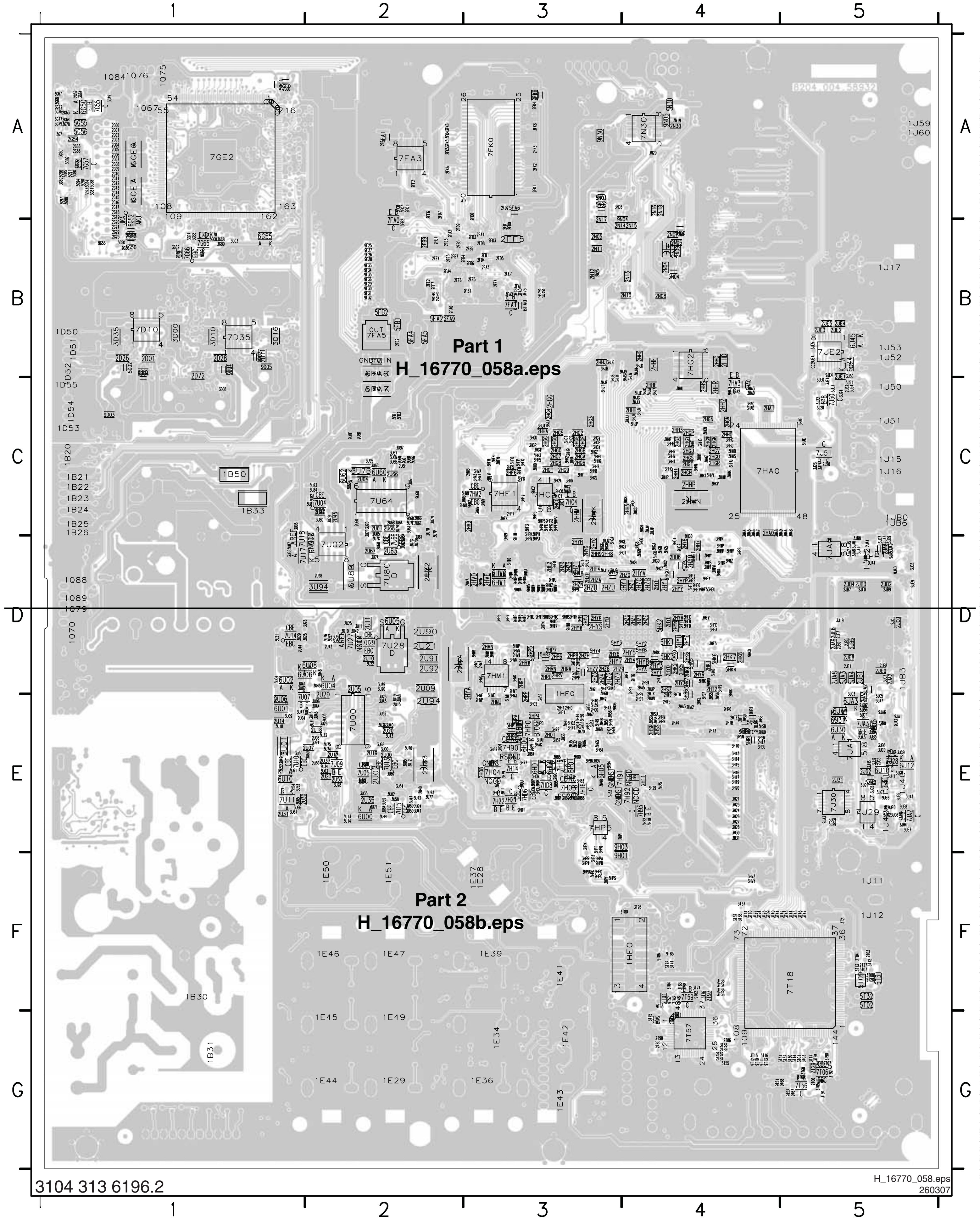
Layout Small Signal Board (Part 1 Top Side)



Layout Small Signal Board (Part 2 Top Side)

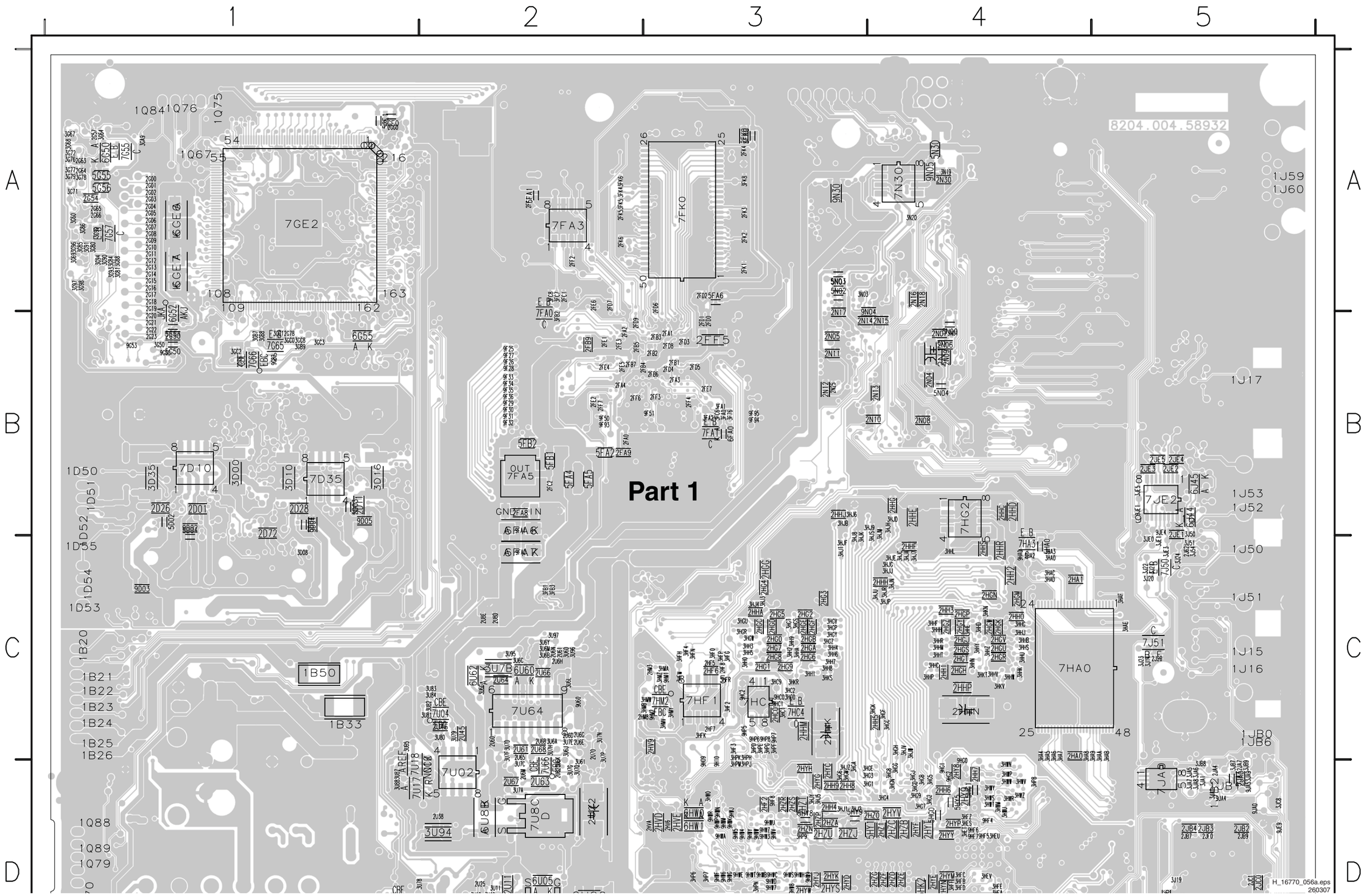


Layout Small Signal Board (Overview Bottom Side)

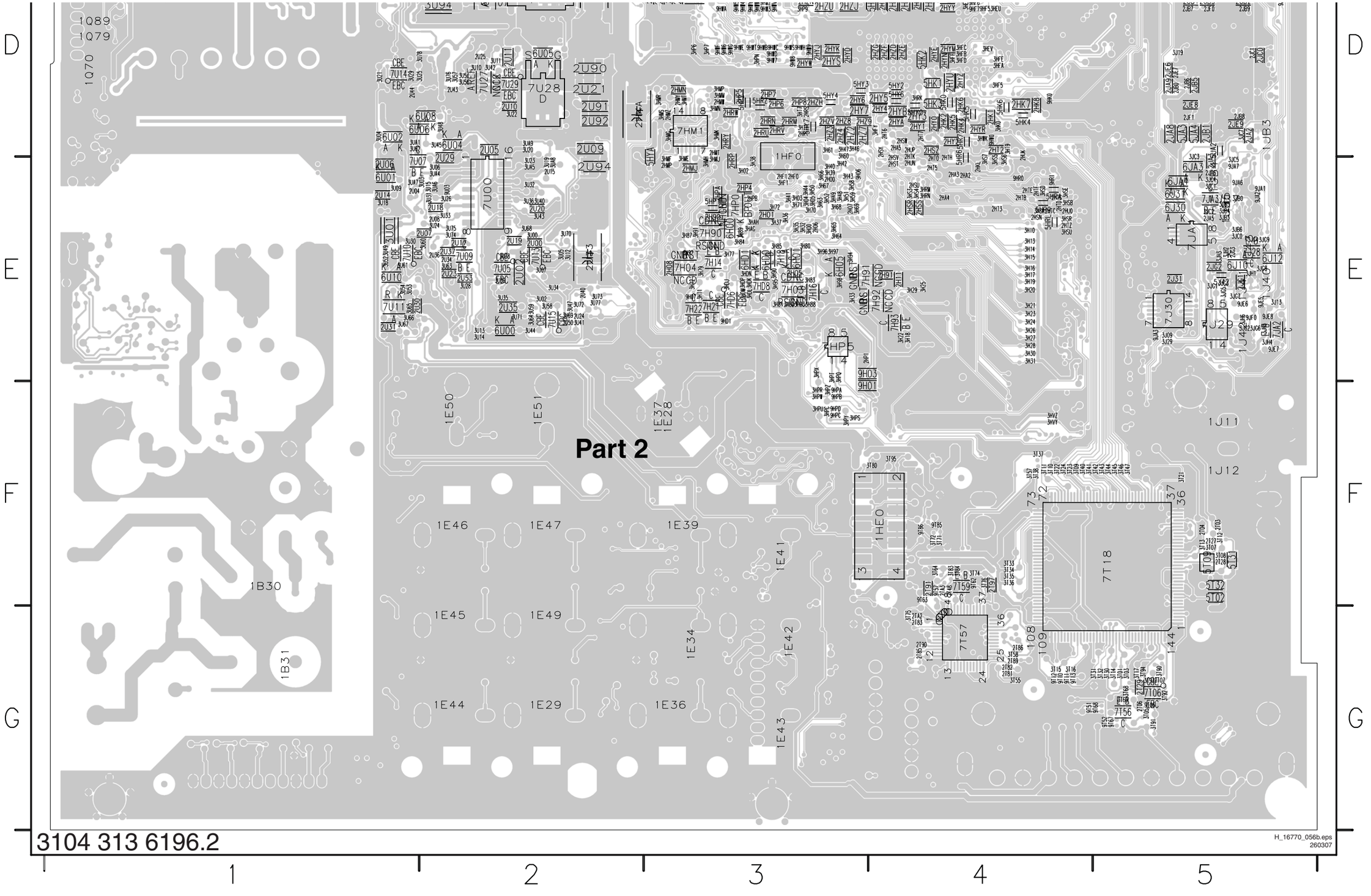


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1B50	C1	2HGB	C3	2HYC	D3	2U08	E2	3H21	E4	3HG9	D4	3HPS	F3	3T38	F4	3U80	C2	7G65	B1	9HW7	D3
1HE0	F4	2HGC	C3	2HYD	D3	2U09	D2	3H22	E4	3HGA	D3	3HPT	E3	3T40	F4	3U81	C2	7G66	B1	9HW8	D3
1HF0	D3	2HGD	C3	2HYE	D4	2U10	D2	3H23	E4	3HGB	D4	3HPU	F3	3T41	F4	3U82	C2	7GE2	A1	9HW9	D3
2D01	B1	2HGE	C3	2HYF	D4	2U11	D2	3H24	E4	3HGC	C4	3HPW	F3	3T42	F5	3U83	C2	7H03	E3	9HWA	D3
2D11	B1	2HGF	C3	2HYG	D3	2U14	E1	3H25	E4	3HGD	D4	3HPX	E3	3T43	F5	3U84	C2	7H04	E3	9HWB	D3
2D26	B1	2HGG	C3	2HYH	D3	2U15	E2	3H26	E4	3HGE	D4	3HPY	F3	3T44	F5	3U87	D1	7H14	E3	9HWC	D3
2D28	B1	2HGH	C4	2HYJ	D3	2U17	E2	3H27	E4	3HGF	C4	3HPZ	F3	3T45	F5	3U88	D1	7H16	E3	9HWD	D3
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2FA8	B2	2HGS	C4	2HYT	D4	2U24	E2	3H35	E3	3HGP	C3	3HS6	E4	3T68	G5	3UA5	E2	7H93	E4	9HWM	D3
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2FB7	B2	2HH1	C4	2HZ2	D3	2U36	E2	3H43	E3	3HGZ	C3	3HT7	D3	3T83	F4	5D03	B1	7HG2	C4	9HWW	D3
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2H01	E3	2HT5	E4	2N14	B3	3G90	A1	3HES	D4	3HMB	C3	3JH4	E5	3U69	E2	6H05	E3	9H09	D3		
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2H06	E3	2HT7	D4	2N16	A4	3G93	A1	3HEU	D4	3HMF	E3	3JH6	E5	3U6B	C2	6HD1	E3	9HA0	C4		
2H07	E3	2HTB	E4	2N17	B3	3G94	A1	3HEV	D4	3HMG	D3	3N01	B4	3U6C	C2	6HW0	D3	9HC0	C3		
2H08	E3	2HTC	E4	2N18	A4	3G96	A1	3HF0	C3	3HMH	E3	3N03	A3	3U6D	C2	6HW1	D3	9HC1	C3		
2H11	E4	2HTD	E4	2N19	B4	3G97	A1	3HF1	E3	3HMJ	E3	3N19	A4	3U6G	C2	6J10	E5	9HC2	C3		
2H90	E3	2HTE	E4	2N25	B3	3G98	A1	3HF2	C3	3HMK	D3	3N20	A4	3U6I	D2	6J12	E5	9HD1	E3		
2H91	E4	2HTF	E4	2N30	A4	3G99	A1	3HF3	C3	3HMM	D3	3T01	G5	3U6J	C2	6J30	E5	9HF4	D4		
2HA0	C4	2HTG	E4	2T03	F5	3GA9	A1	3HF4	C3	3HMN	D3	3T03	G5	3U6K	D2	6J31	E5	9HF5	D4		
2HA1	C4	2HTH	E4	2T04	F5	3GB7	B1	3HF5	D4	3HMP	D3	3T05	G5	3U6L	C2	6J44	B5	9HF6	D4		
2HA2	E4	2HTK	D4	2T06	G5	3GB8	B1	3HFA	D4	3HMR	D3	3T07	F5	3U6M	C2	6J45	B5	9HF7	D4		
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2HF8	C3	2HY0	D4	2T89	G4	3H05	E3	3HFP	C3	3HPC	F3	3T21	F5	3U79	C2	6U60	C2	9HP8	C3		
2HG0	C3	2HY1	D4	2T90	G4	3H10	E4	3HFR	C3	3HPD	C3	3T22	F4	3U7A	D2	6U62	C2	9HPA	F3		
2HG1	C3	2HY2	D4	2T91	F4	3H11	E3	3HFY	D4	3HPE	C3	3T23	F4	3U7B	C2	6U8B	D2	9HPB	F3		
2HG2	C3	2HY3	D4	2T97	F4	3H12	E3	3HFZ	D4	3HPF	C3	3T24	F4	3U7C	D2	7D10	B1	9HPC	F3		
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2HG7	C3	2HY8	D4	2U04	E1	3H17	E4	3HG5	D4	3HPM	D3	3T34	F4	3U7H	C2	7FA5	B2	9HW3	D3		
2HG8	C3	2HY9	D4	2U05	D2	3H18	E4	3HG6	D3	3HPN	D3	3T35	F4	3U7N	C2	7FK0	A2	9HW4	D3		
2HG9	C3	2HYA	D4	2U06	E1	3H19	E4	3HG7	D4	3HPQ	E3	3T36	F4	3U7P	C2	7G55	A1	9HW5	D3		

Layout Small Signal Board (Part 1 Bottom Side)



Layout Small Signal Board (Part 2 Bottom Side)



Side I/O Panel

SIDE FACING SIDE AV

1301
YKF51-5564
SVHS
Y_CVBS
C
S302
S301
2303 22p
I303
3303 10R
3304 100R
4304
3302 75R
2301 47p
2302 47p
6301 DF3A6.8
6302 DF3A6.8
3301 75R
3305 10R
3306 100R
4306
2304 47p
YELLOW
CVBS
1302-1
I306
S303
2311 22p
3307 100R
4307
6303 DF3A6.8
WHITE
L
1302-2
I308
S304
4301
4302
2313 **
3314 **
3308 **
3309 **
2305 **
6304 DF3A6.8
RED
R
1302-3
I309
S305
2314 **
3315 **
3310 **
3311 **
2306 **
6305 DF3A6.8
HEADPHONE
1303
YKB21-5101A
I311
I312
4308
4309
S306
S307
S308
2307 22n
2308 22n
2309 10n
2310 10n
3312 10K
3313 10K
6306 DF3A6.8
6307 DF3A6.8

TO 1M36 OF BJ/EBJ SSB B

1304
I321
I314 FRONT_Y_CVBS_IN
I315 FRONT_C_IN
I316 L_FRONT_IN
I317 FRONT_DETECT
I318 R_FRONT_IN
I319 HEAD_PH_L
I320 HEAD_PH_R

1310
B3B-PH-K

TO 1H01 OF BJ SSB /
TO 1M60 OF EBJ SSB B

1309
B5B-PH-K
I330
I331
I332
5300
4310
4311
220R
2312 100u 16V
I325
I326
I327
I328
1308
292303-4
USB
S310
S311
S312
4303

** **DIVERSITY TABLE**

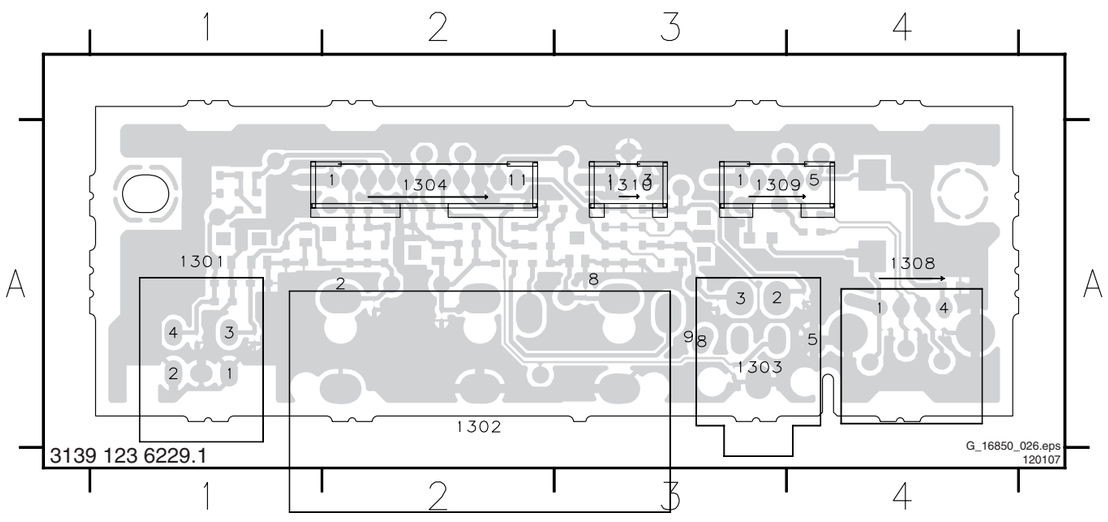
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2305	100p	100p	1n
2306	100p	100p	1n
2313	NA	680p	1n
2314	NA	680p	1n
3314	NA	33K	NA
3315	NA	33K	NA
3308	100R	1K	150R
3310	100R	1K	150R
3309	100K	NA	33K
3311	100K	NA	33K

3139 123 6229.1

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110107

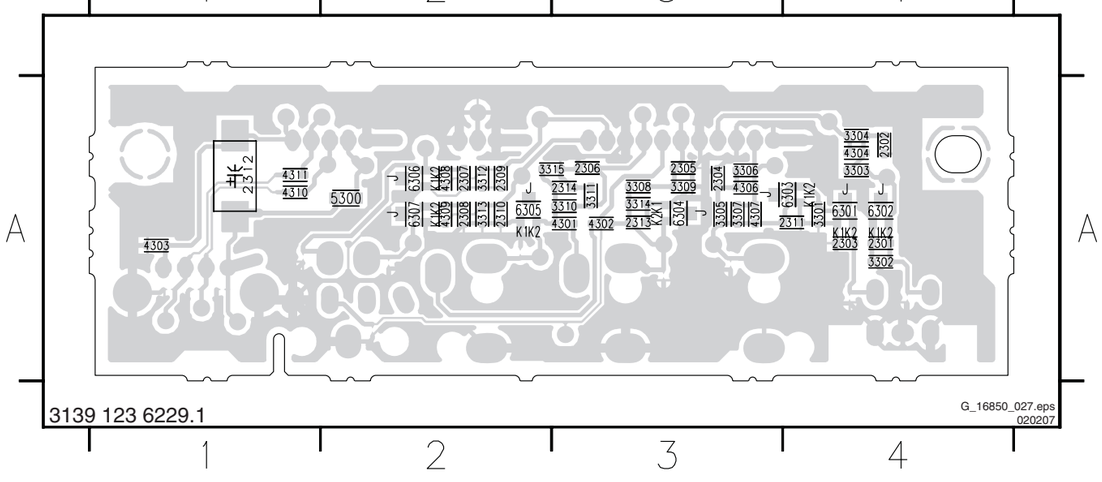
Layout Side I/O Panel (Top Side)

1301 A1 1302 A2 1303 A3 1304 A2 1308 A4 1309 A3 1310 A3



Layout Side I/O Panel (Bottom Side)

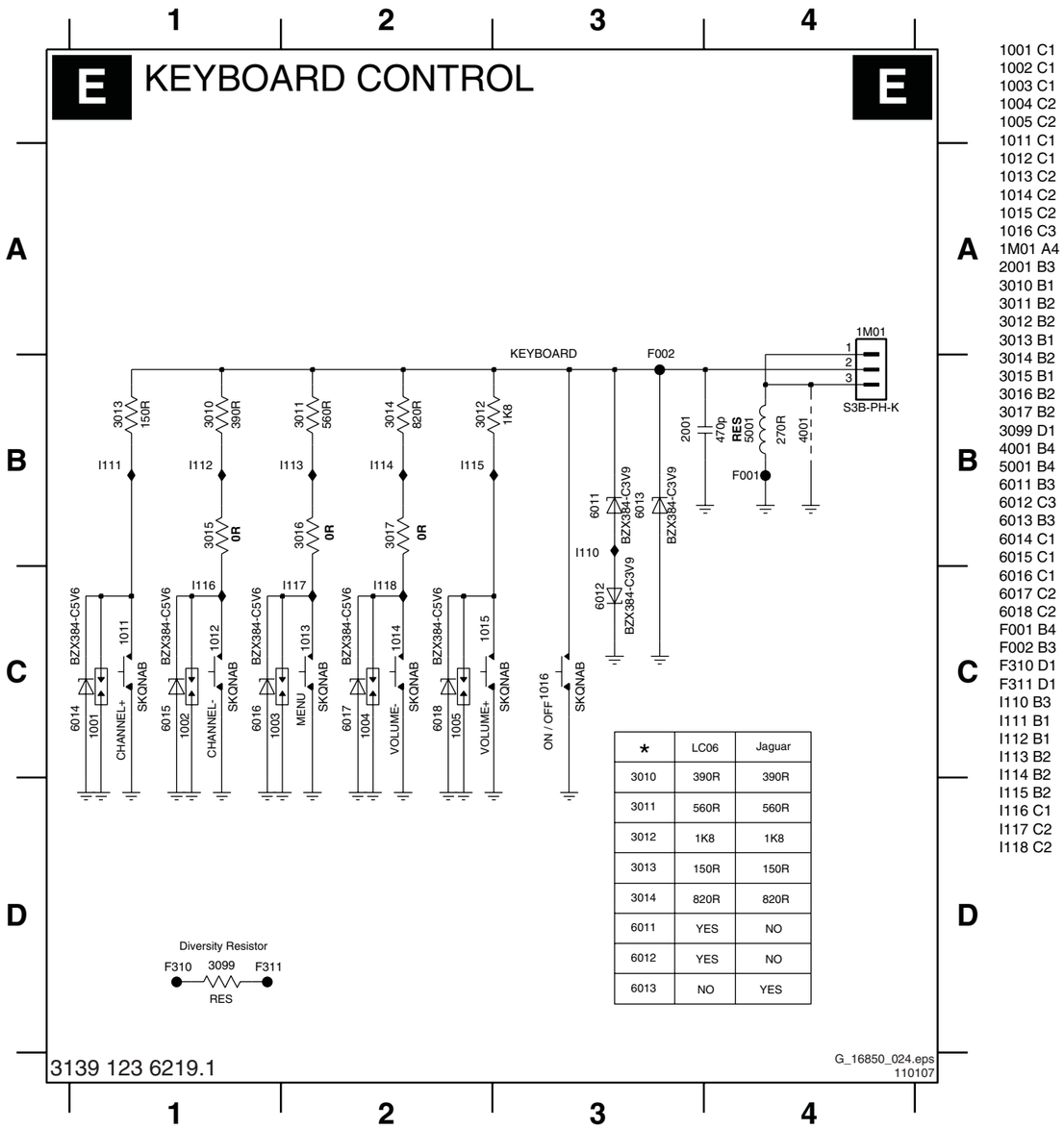
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2302 A4	2308 A2	2314 A3	3306 A3	3312 A2	4303 A1	4310 A1	6304 A3
2303 A4	2309 A2	3301 A4	3307 A3	3313 A2	4304 A4	4311 A1	6305 A2
2304 A3	2310 A2	3302 A4	3308 A3	3314 A3	4306 A3	5300 A2	6306 A2
2305 A3	2311 A4	3303 A4	3309 A3	3315 A3	4307 A3	6301 A4	6307 A2
2306 A3	2312 A1	3304 A4	3310 A3	4301 A3	4308 A2	6302 A4	



Personal Notes:

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131004

Keyboard Control Panel



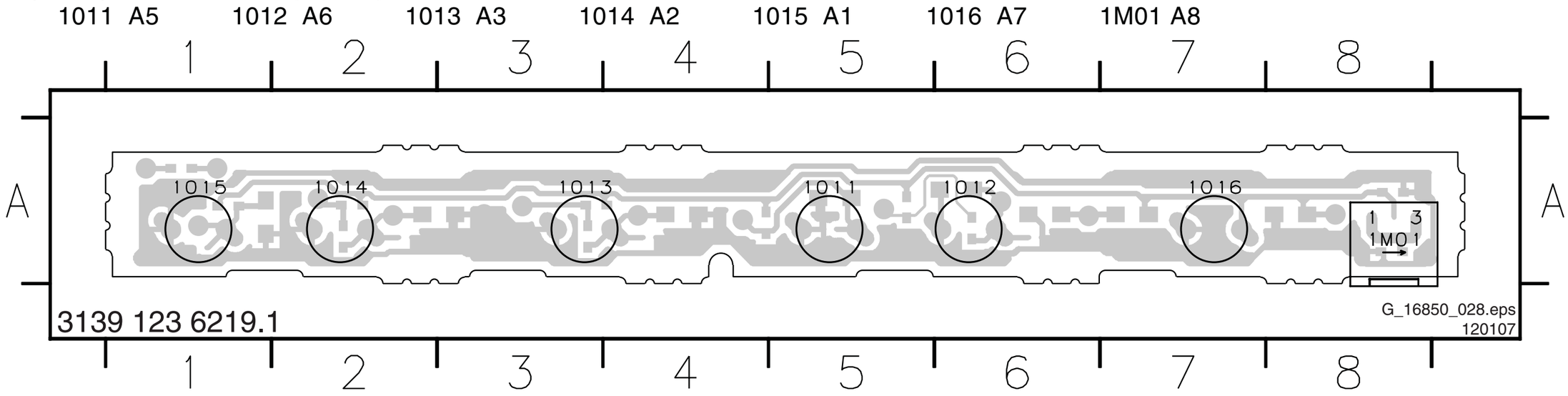
*	LC06	Jaguar
3010	390R	390R
3011	560R	560R
3012	1K8	1K8
3013	150R	150R
3014	820R	820R
6011	YES	NO
6012	YES	NO
6013	NO	YES

1001 C1
1002 C1
1003 C1
1004 C2
1005 C2
1011 C1
1012 C1
1013 C2
1014 C2
1015 C2
1016 C3
1M01 A4
2001 B3
3010 B1
3011 B2
3012 B2
3013 B1
3014 B2
3015 B1
3016 B2
3017 B2
3099 D1
4001 B4
5001 B4
6011 B3
6012 C3
6013 B3
6014 C1
6015 C1
6016 C1
6017 C2
6018 C2
F001 B4
F002 B3
F310 D1
F311 D1
I110 B3
I111 B1
I112 B1
I113 B2
I114 B2
I115 B2
I116 C1
I117 C2
I118 C2

Personal Notes:

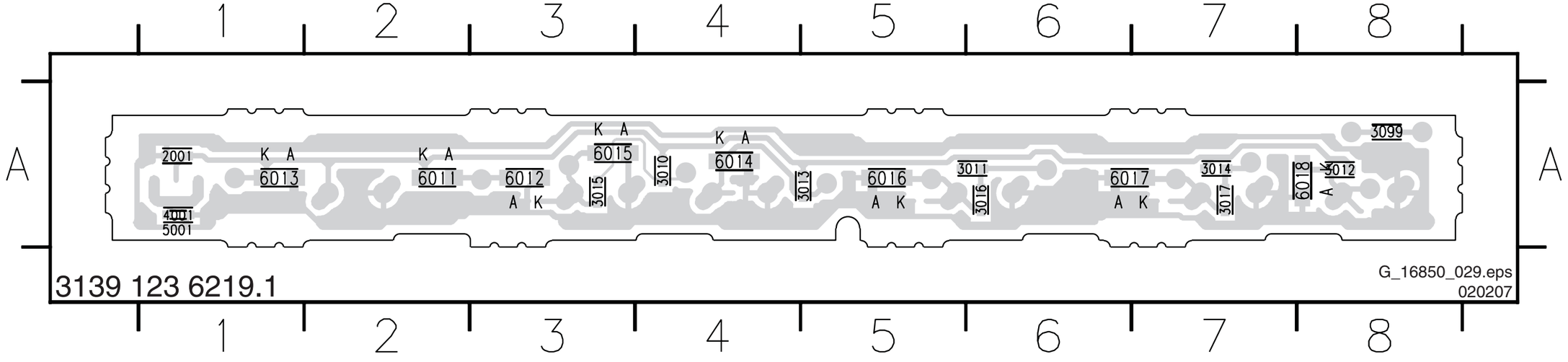
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Layout Keyboard Control Panel (Top Side)

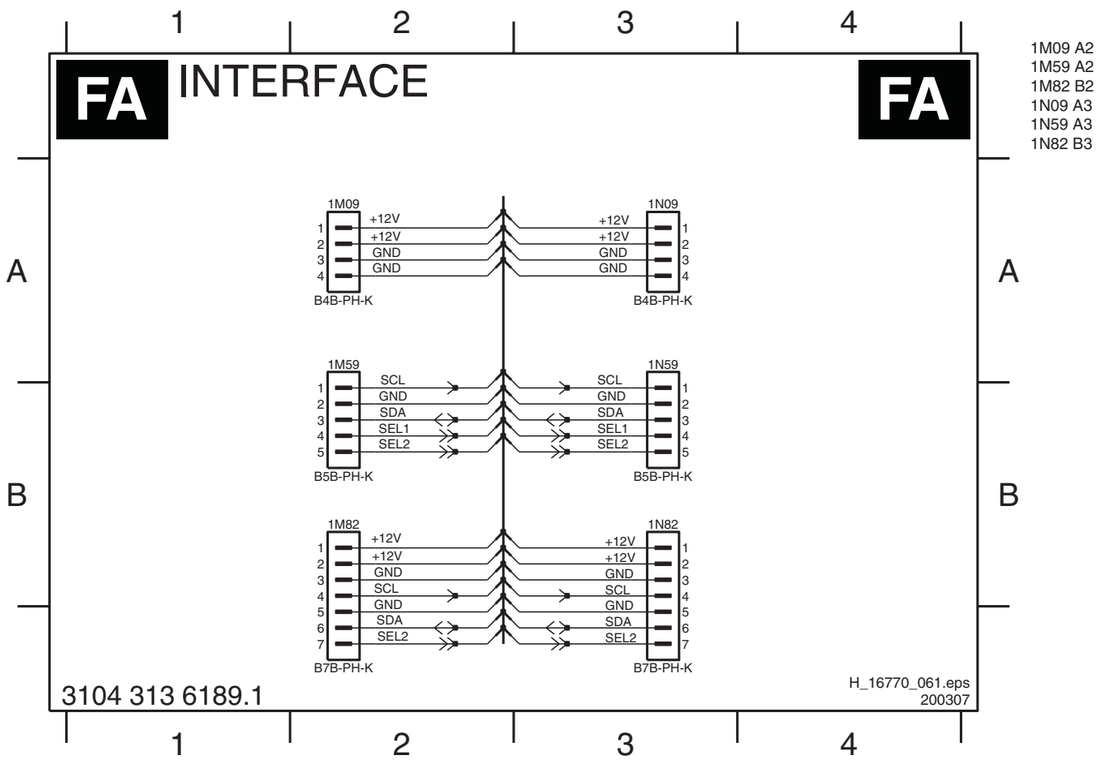


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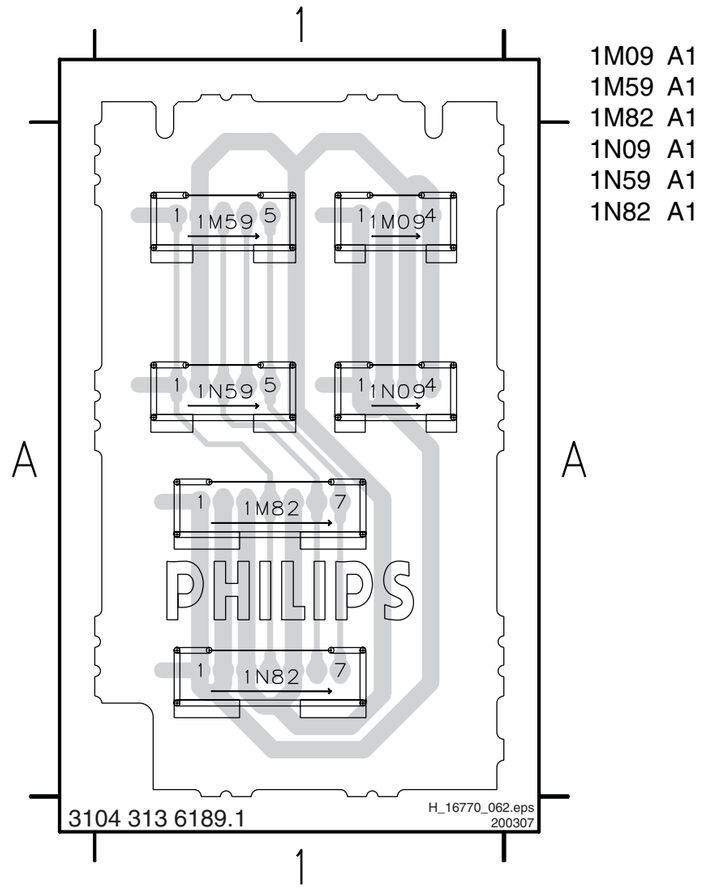
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3010 A4 3012 A8 3014 A7 3016 A6 3099 A8 5001 A1 6012 A3 6014 A4 6016 A5 6018 A8



Interface Panel

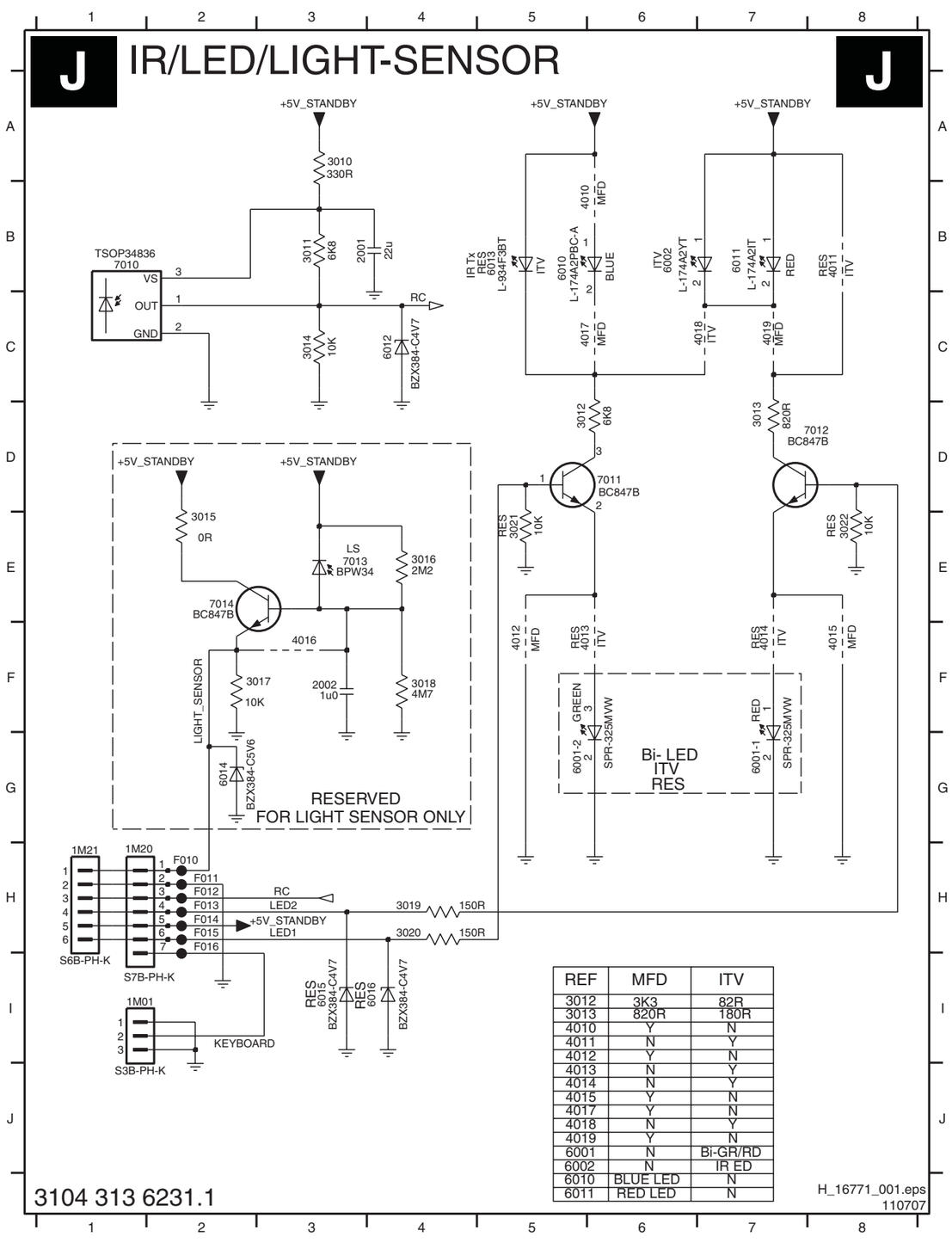


Layout Interface Panel



Front IR / LED Panel

1M01 I1	3010 A3	3015 E2	3020 H4	4012 F5	4017 C5	6002 B6	6014 G2	7012 D8	F012 H2
1M20 H1	3011 B3	3016 E4	3021 E5	4013 F5	4018 C7	6010 B5	6015 I3	7013 E4	F013 H2
1M21 H1	3012 D5	3017 F3	3022 E8	4014 F7	4019 C7	6011 B7	6016 I4	7014 E2	F014 H2
2001 B3	3013 D7	3018 F4	4010 B5	4015 F8	6001-1 G7	6012 C4	7010 B1	F010 H2	F015 H2
2002 F3	3014 C3	3019 H4	4011 B8	4016 F3	6001-2 G5	6013 B5	7011 D6	F011 H2	F016 H2



REF	MFD	ITV
3012	3K3	82R
3013	820R	180R
4010	Y	N
4011	N	Y
4012	Y	N
4013	N	Y
4014	N	Y
4015	Y	N
4017	Y	N
4018	N	Y
4019	Y	N
6001	N	Bi-GR/RD
6002	N	IR ED
6010	BLUE LED	N
6011	RED LED	N

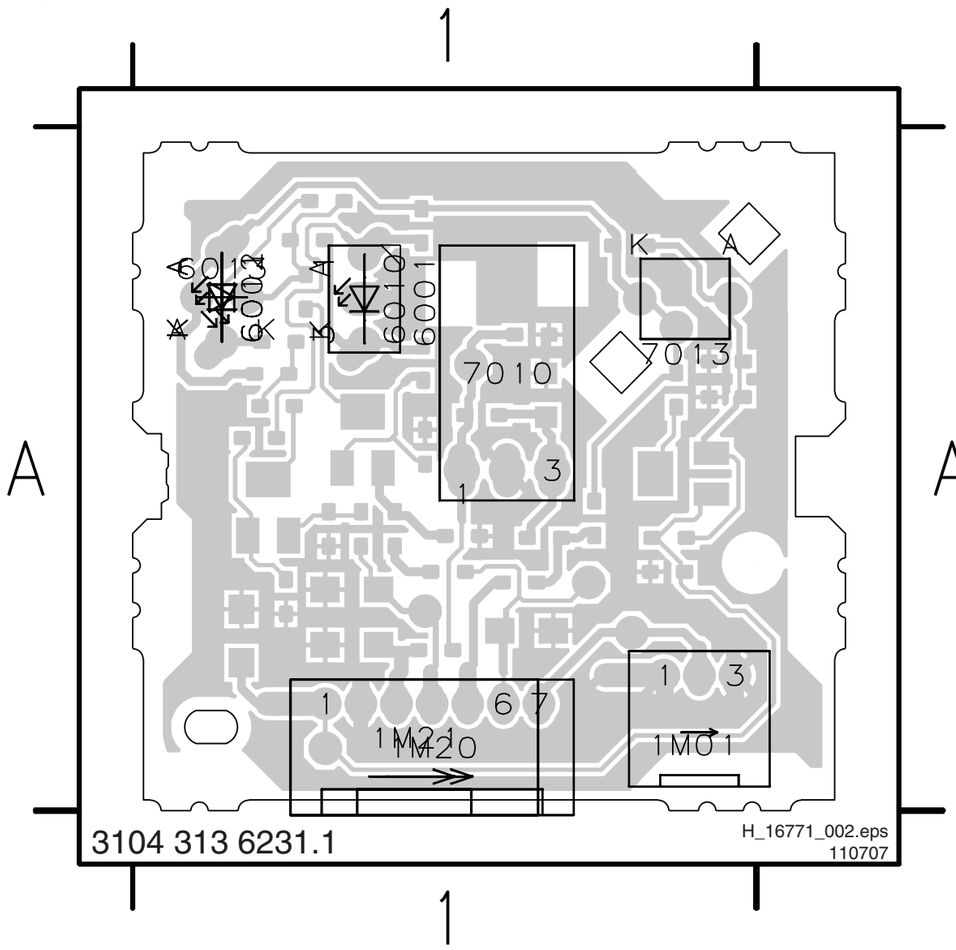
3104 313 6231.1

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110707

Personal Notes:

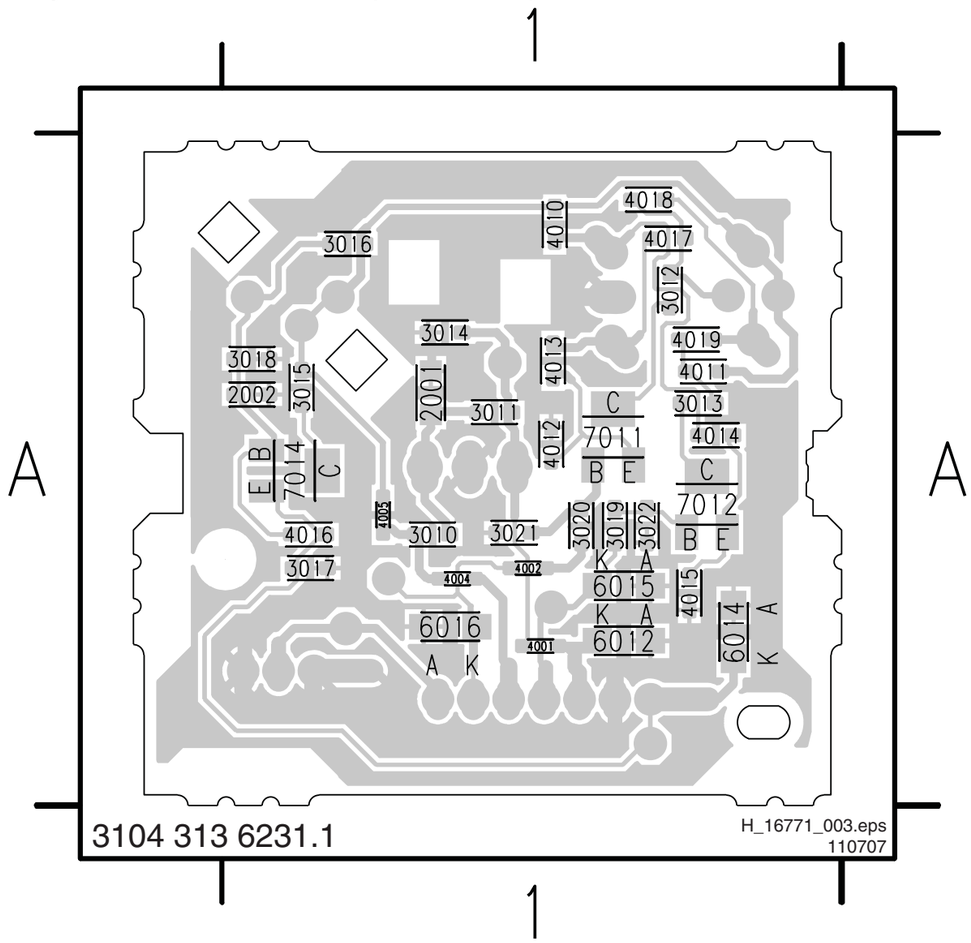
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131004

Layout Front IR / LED Panel (Top Side)



1M01 A1
1M20 A1
1M21 A1
6001 A1
6002 A1
6010 A1
6011 A1
6013 A1
7010 A1
7013 A1

Layout Front IR / LED Panel (Bottom Side)



2001 A1
2002 A1
3010 A1
3011 A1
3012 A1
3013 A1
3014 A1
3015 A1
3016 A1
3017 A1
3018 A1
3019 A1
3020 A1
3021 A1
3022 A1
4001 A1
4002 A1
4004 A1
4005 A1
4010 A1
4011 A1
4012 A1
4013 A1
4014 A1
4015 A1
4016 A1
4017 A1
4018 A1
4019 A1
6012 A1
6014 A1
6015 A1
6016 A1
7011 A1
7012 A1
7014 A1

Personal Notes:

E_06532_013.eps
131004

8. Alignments

Index of this chapter:
8.1 General Alignment Conditions
8.2 Hardware Alignments
8.3 Software Alignments
8.4 Option Settings

Note: The Service Default Mode (SDM) and Service Alignment Mode (SAM) are described in chapter 5. Menu navigation is done with the CURSOR UP, DOWN, LEFT or RIGHT keys of the remote control transmitter.

8.1 General Alignment Conditions

Perform all electrical adjustments under the following conditions:
- Power supply voltage (depends on region):
  - AP-NTSC: 120 V_{AC} or 230 V_{AC} / 50 Hz (± 10%).
  - AP-PAL-multi: 120 - 230 V_{AC} / 50 Hz (± 10%).
  - EU: 230 V_{AC} / 50 Hz (± 10%).
  - LATAM-NTSC: 120 - 230 V_{AC} / 50 Hz (± 10%).
  - US: 120 V_{AC} / 60 Hz (± 10%).
- Connect the set to the mains via an isolation transformer with low internal resistance.
- Allow the set to warm up for approximately 15 minutes.
- Measure voltages and waveforms in relation to correct ground (e.g. measure audio signals in relation to AUDIO_GND).
  Caution: It is not allowed to use heatsinks as ground.
- Test probe: Ri > 10 Mohm, Ci < 20 pF.
- Use an isolated trimmer/screwdriver to perform alignments.

8.1.1 Alignment Sequence

- First, set the correct options:
  - In SAM, select “Options”, and then “Option numbers”.
  - Fill in the option settings for “Group 1” and “Group 2” according to the set sticker (see also paragraph “Option Settings”).
  - Press OK on the remote control **before** the cursor is moved to the left.
  - In submenu “Option numbers” select “Store” and press OK on the RC.
    OR:
  - In main menu, select “Store” again and press OK on the RC.
  - Switch the set to Stand-by.
- Warming up (>15 minutes).

8.2 Hardware Alignments

Not applicable.

8.3 Software Alignments

Put the set in SAM mode (see Chapter 5 “Service Modes, Error Codes and Fault Finding”). The SAM menu will now appear on the screen. Select ALIGNMENTS and go to one of the sub menus. The alignments are explained below.

The following items can be aligned:

- Whitepoint.
- Black Level (BL) offset Red and Green.

To store the data:
- Press OK on the RC **before** the cursor is moved to the left.
- In main menu select “Store” and press OK on the RC.
- Press MENU on the RC to switch back to the main menu.
- Switch the set to stand-by mode.

For the next alignments, supply the following test signals via a video generator to the RF input:
- **EU/AP-PAL** models: a PAL B/G TV-signal with a signal strength of at least 1 mV and a frequency of 475.25 MHz
- **US/AP-NTSC** models: an NTSC M/N TV-signal with a signal strength of at least 1 mV and a frequency of 61.25 MHz (channel 3).
- **LATAM** models: an NTSC M TV-signal with a signal strength of at least 1 mV and a frequency of 61.25 MHz (channel 3).
- **DVB-T** models: see table “SDM default settings” in chapter 5.

8.3.1 White Point

- Set “Active control” to “Off”.
- Choose “TV menu”, “TV Settings” and then “Picture” and put:
  - “Dynamic contrast” to “Off”.
  - “Color enhancement” to “Off”.
  - “Light sensor” to “Off”.
  - “Clear LCD” to “On” where applicable.
  - “Color” to “0”.
  - “Contrast” to “100”.
- Go to the SAM and select “Alignments”-> “Whitepoint”.

White point alignment LCD screens:
- Use a 100% white screen as input signal and set the following values:
  - “Color temperature”: “Normal”.
  - All “Whitepoint” values to: “127”.
  - “Red BL offset” values to “8”.
  - “Green BL offset” values to “4”.

In case you have a color analyzer:
- Measure with a calibrated (phosphor- independent) color analyzer in the centre of the screen. Consequently, the measurement needs to be done in a dark environment.
- Adjust the correct x, y coordinates (while holding one of the White point registers R, G or B on 127) by means of decreasing the value of one or two other white points to the correct x, y coordinates (see table “White D alignment values”). Tolerance: dx: ± 0.004, dy: ± 0.004.
- Repeat this step for the other color temperatures that need to be aligned.
- When finished press OK on the RC and then press STORE (in the SAM root menu) to store the aligned values to the NVM.
- Restore the initial picture settings after the alignments.

Table 8-1 White D alignment values

Value	Cool (11000 K)	Normal (9000 K)	Warm (6500 K)
x	0.276	0.287	0.313
y	0.282	0.296	0.329

If you do not have a color analyzer, you can use the default values. This is the next best solution. The default values are average values coming from production (statistics).
- Select a COLOR TEMPERATURE (e.g. COOL, NORMAL, or WARM).
- Set the RED, GREEN and BLUE default values according to the values in the “Tint settings” table.
- When finished press OK on the RC, then press STORE (in the SAM root menu) to store the aligned values to the NVM.
- Restore the initial picture settings after the alignments.

Table 8-2 Tint settings

Color Temp.	R	G	B
Cool	122	120	121
Normal	125	118	108
Warm	127	110	75

8.4 Option Settings

8.4.1 Introduction

The microprocessor communicates with a large number of I²C ICs in the set. To ensure good communication and to make digital diagnosis possible, the microprocessor has to know which ICs to address. The presence / absence of these specific ICs (or functions) is made known by the option codes.

Notes:
- After changing the option(s), save them by pressing the OK button on the RC **before** the cursor is moved to the left, select STORE in the SAM root menu and press OK on the RC.
- The new option setting is only active after the TV is switched “off” / “stand-by” and “on” again with the Mains switch (the NVM is then read again).

8.4.2 Dealer Options

For dealer options, in SAM select “Dealer options” and then “Personal options”.

Table 8-3 Dealer options

Menu item	Subjects	Options	Description
Personal Options	Picture Mute	On	Picture is muted / not muted in case no input signal is detected at input connectors
		Off	
	Virgin Mode	On	TV starts up / does not start up (once) with a language selection menu after the Mains switch is turned “on” for the first time (virgin mode)
		Off	

8.4.3 (Service) Options

Select the sub menu's to set the initialization codes (options) of the set via text menus.

Table 8-4 Service options

Menu-item	Subjects	Options	Description
PIP/DS	Dual Screen	None	No DS
		One tuner dual screen	One tuner DS
		Two tuner dual screen	Two tuner DS
Display	Screen	“Value”	Used screen size, type, and resolution (see figure “Display option code overview” in chapter 5)
	Dimming Backlight	On / Off	Feature present / not present
Video Repro	Perfect Pixel	On / Off	Perfect Pixel On / Off
	Ambient Light	Off / Mono / Stereo/Triple / Quad	Inverter not present / one inverter / two inverters / three inverters / four inverters
	Ambient Light technology	CCFL / LED	CCFL / LED
	Ambient Light driver	Pacific 3 / MOP / DFI	Ambient Light driver
	MOP	Present / Not present	MOP present / not present
	Light sensor	Present / Not present	MOP present / not present
	Light sensor type	Step / ME7 / MS7 / Canvas / Aurea	Styling
Source selection	HDMI 3	Present / Not present	HDMI 3 Present / Not present
	HDMI CEC	On / Off	HDMI CEC On/ Off
Audio Repro	Acoustic System (Cabinet design, used for setting dynamic audio parameters)	None	
		Top A 2k7	
		MS7 model A 2k7	
		MS7 model B 2k7	
		ME7 32" 2k7	
		ME7 model A 2k7	
		ME7 model B 2k7	
		Step 63" Combat Coscone 2k7	
		Aurea	
Miscellaneous	Tuner Type	TD1736 / TD1716	TD1736 = US, TD1716 = Europe
	Nyquist SAW filter	On / Off	SAW filter on/off
	I²C configuration	with PCA9540 / with PCA9515 / via channel decoder	
	Upgrade assistant	Present / Not present	
Opt. no.	Group 1		xxxxx xxxxx xxxxx xxxxx (see set sticker)
	Group 2		xxxxx xxxxx xxxxx xxxxx (see set sticker)
	Store	Store	

8.4.4 Opt. No. (Option numbers)

Select this sub menu to set all options at once (expressed in two long strings of numbers).
An option number (or “option byte”) represents a number of different options. When you change these numbers directly, you can set all options very quickly. All options are controlled via eight option numbers.
When the NVM is replaced, all options will require resetting. To be certain that the factory settings are reproduced exactly, you must set both option number lines. You can find the correct option numbers on a sticker inside the TV set and in Table “Option code overview”.

Example: The options sticker gives the following option numbers:
- 04368 00005 01066 08707
- 00000 00032 00512 00000

The first line (group 1) indicates hardware options 1 to 4, the second line (group 2) indicates software options 5 to 8.
Every 5-digit number represents 16 bits (so the maximum value will be 65536 if all options are set).
When all the correct options are set, the sum of the decimal values of each Option Byte (OB) will give the option number.
See table “Option code overview” for the options.

Table 8-5 Option code overview

CTN	Options Group 1	Options Group 2	Displ. code
42PFL7422D/37	41226 03077 08535 46707	24896 00064 00000 00000	064
42PFL7432D/37	41386 03333 08535 46707	24896 00064 00000 00000	064
47PFL7422D/37	41226 03077 08535 46707	24913 00064 00000 00000	081
47PFL7432D/37	41386 03333 08535 46707	24913 00064 00000 00000	081
47PFL5432D/37	41226 02053 08535 46707	24913 00064 00000 00000	081
47PFL9732D/37_1	41386 03334 08535 13939	24895 00064 00000 00000	063
47PFL9732D/37_2	41386 03334 08535 13939	24933 00064 00000 00000	101
52PFL7422D/37	41226 03078 08535 13939	24930 00064 00000 00000	098
52PFL7432D/37	41226 03333 08535 13939	24930 00064 00000 00000	098
52MF437B/37	41226 03078 08535 13875	24930 00064 00000 00000	098
52MF437S/37	41226 03078 08535 13875	24930 00064 00000 00000	098

Important: after having edited the option numbers as described above, you **must** press OK on the remote control **before** the cursor is moved to the left!

8.5 Reset of Repaired SSB

A very important issue towards a repaired SSB from a service repair shop, implies the reset of the NVM on the SSB.

A repaired SSB in service should get the service Set type “00PF0000000000” and Production code “00000000000000”. Also the virgin bit is to be set. To set all this, you can use the ComPair tool.

9. Circuit Descriptions, Abbreviation List, and IC Data Sheets

Index of this chapter:

9.1 Introduction
9.2 LCD Power Supply
9.3 On-Board Platform Supply
9.4 On-board DC/DC Converters
9.5 Front-End
9.6 PNX85xx
9.7 Back-end
9.8 Ambient Light
9.9 Abbreviation List
9.10 IC Data Sheets

Notes:

- Only **new** circuits (circuits that are not published recently) are described.
- Figures can deviate slightly from the actual situation, due to different set executions.
- For a good understanding of the following circuit descriptions, please use the wiring, block (chapter 6) and circuit diagrams (chapter 7). Where necessary, you will find a separate drawing for clarification.

9.1 Introduction

This chassis (development name “TV520“) is the successor of the Jaguar platform (BJx.x and FJx.x chassis).

The platform is built around the PNX85xx “System on Chip” (SoC), which performs the video and audio processing. The SoC **integrates** the functionality of ICs that were previously used in the Jaguar platform: PNX2015 (AVIP/COLUMBUS), PNX3000 (MPIF), TDA9975 (HDMI receiver), T6TE0TBG (SPIDER), and PNX8550 (VIPER).

Remaining additional key components in this chassis are:

- CYCLONE FPGA 1080p (EP2C8F256C7N) for US region.
- PNX5050 for EU region.
- PACIFIC 3 (T6TF4HFG).

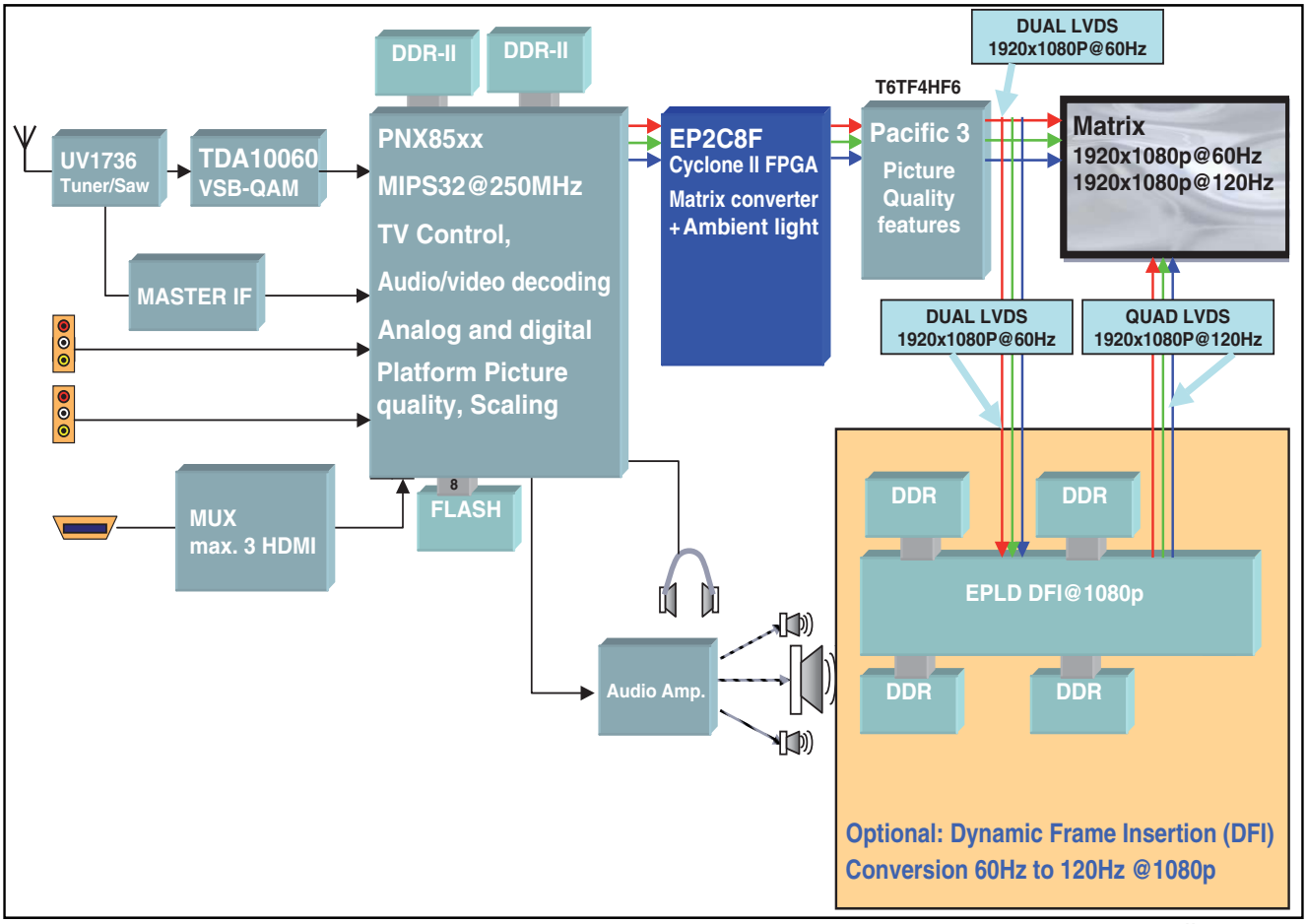
9.1.1 Features

The main features for this chassis are:

- 1080p resolution @ 60 Hz (in some sets)
- Perfect Pixel HD Engine as the successor of Pixel Plus. With this technology, each pixel of the incoming picture is enhanced to better match the surrounding pixels, resulting in a more natural picture. Artifacts and noise in all sources from multimedia to standard TV to highly-compressed high-definition (HD) are detected and reduced. This results in a clean and razor sharp image.
- The introduction of LED AmbiLight.
- ClearLCD, a technology that uses scanning and backlight dimming technology to reduce the motion blur on an LCD screen, caused by the slow response time and the “sample and hold” characteristic of LCD.
- Dynamic Frame Insertion (DFI) (in some sets) resulting in a 1080p resolution @ 120 Hz, thus eliminating the film flicker caused by the frame rate of 24 frames per second of cinematic film.
- Digital Natural Motion (DNM) to compensate the judder (perceived when watching a moving object on the screen), caused as side-effect during frame insertion (DFI) as described above.

9.1.2 TV520 Architecture Overview

For details about the chassis block diagrams refer to chapter “Block diagrams, Test Point Overview, and Waveforms”. An overview of the TV520 architecture can be found in figure “Architecture of TV520 platform”.



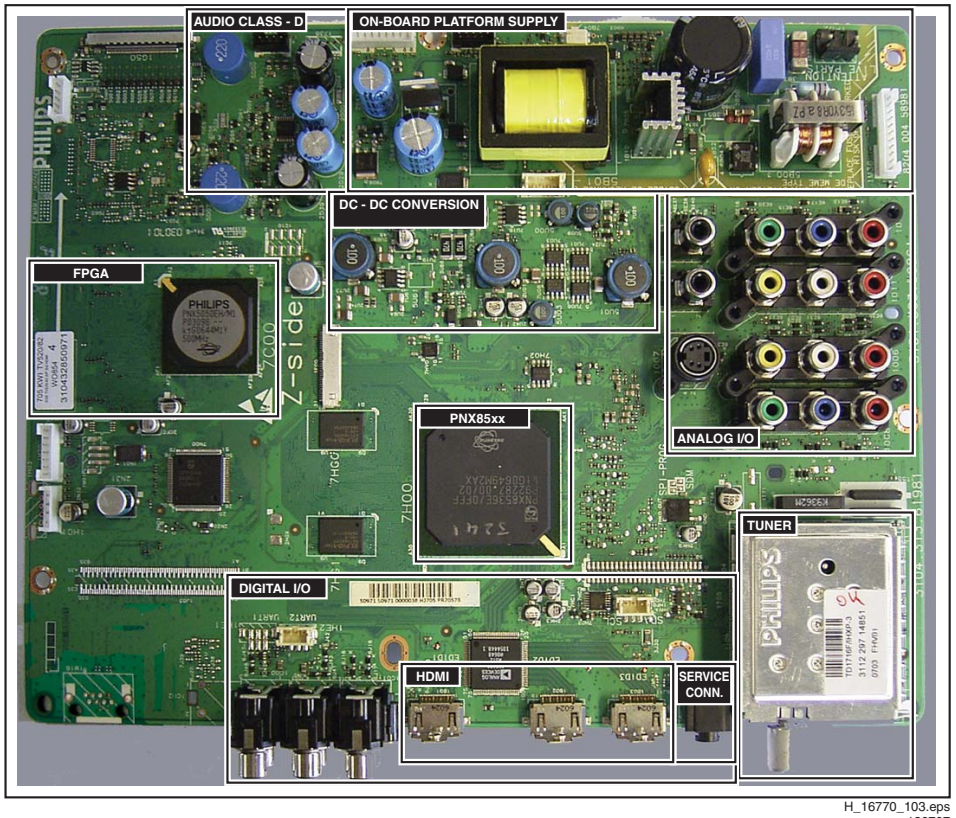
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Figure 9-1 Architecture of TV520 platform

Sets with a resolution of 1366 × 768p @ 60 Hz use the PNX85xx SoC and the T6TF4HFG PACIFIC 3 for video processing. Sets with a resolution of 1920 × 1080p @ 60 Hz use the EP2C8F Cyclone FPGA in addition which also drives the AmbiLight units. To achieve 1920 × 1080p @ 120 Hz however, an additional panel is used for Dynamic Frame Insertion (DFI).

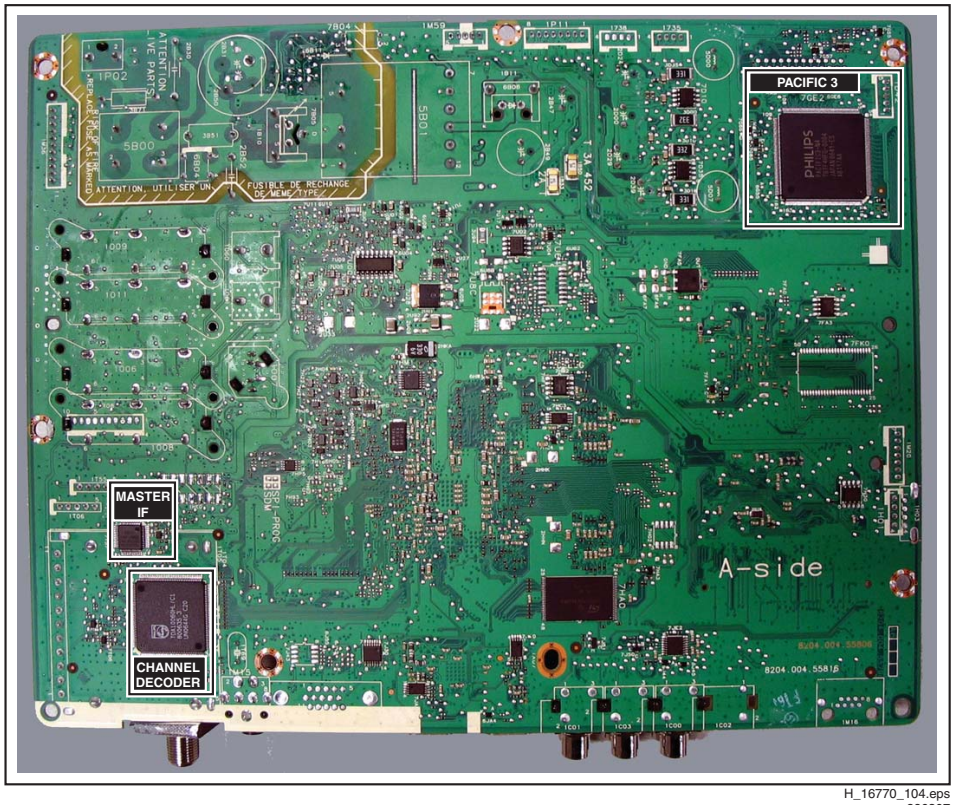
Refer to section “Video Processing” in this chapter for more details.

9.1.3 SSB Cell Layout



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Figure 9-2 SSB top view



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290307

Figure 9-3 SSB bottom view

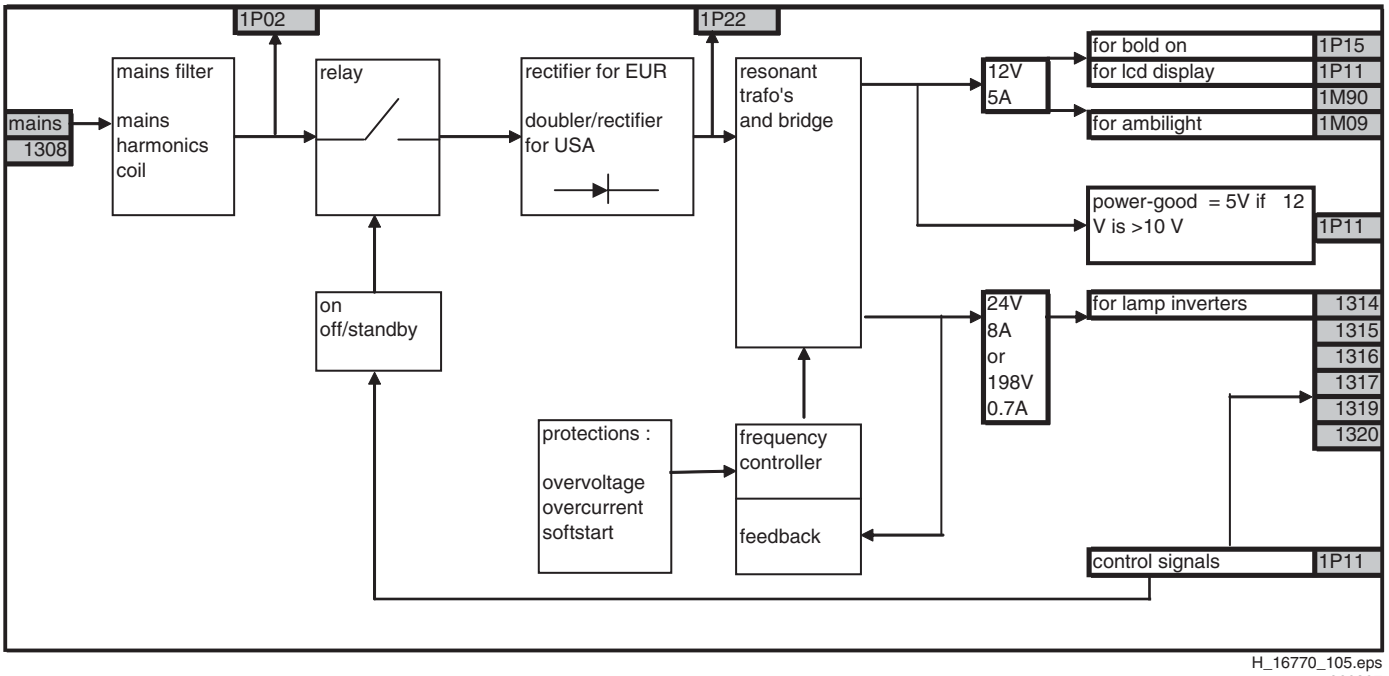
9.2 LCD Power Supply

9.2.1 42" Sets

The 42" sets in this chassis come with a serviceable Power Supply Unit. This supply unit delivers the power for the display, AmbiLight unit and the optional panel (bold-on) for Dynamic Frame Insertion (DFI). Refer to chapter “Circuit Diagrams and PWB Layouts”, diagrams A1 to A3.
The power supply for the SSB and Audio part are located on the SSB itself. For a description of the on-board power supply, refer to Section “On-board Platform Supply”.

The supply unit delivers the following voltages to the chassis:
- 12 V for bold-on panel (optional), LCD panel and AmbiLight (optional).
- 24 V for lamp inverters.

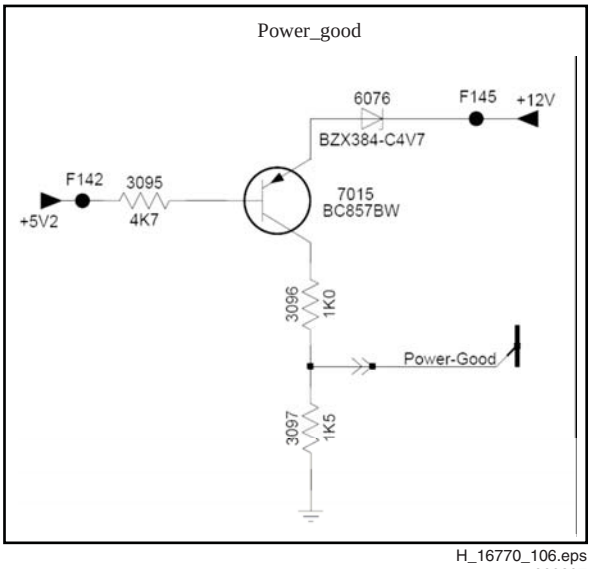
For a block diagram see figure “Block Diagram LCD Power Supply 42”.



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Figure 9-4 Block diagram LCD Power Supply 42"

A Power-Good circuitry is built around items 7015 and 6076. The so-called POWER-GOOD line indicates the correct functioning of the 12 V supply. The voltage on this line is 5 V if the voltage on the 12 V output drops below 10 volt. Refer to figure “Power-Good circuitry”.

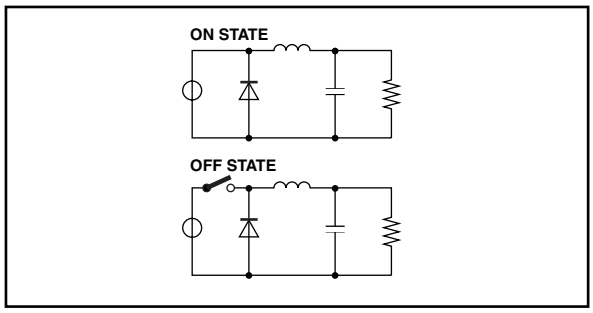


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Figure 9-5 Power-Good circuitry

The +24 V (or 295 V in case of a scanning backlight TV) and +18V voltages are generated through a so-called resonant DC-DC power converter (LLC-converter) (item no. 7005 to 7008 in diagram A2). The output of +18 V requires an additional DC to DC converter which is built around a so-called “Buck converter”.

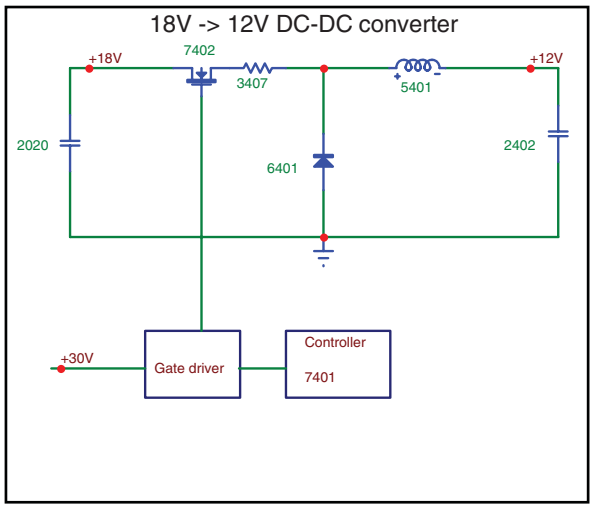
A Buck converter is in fact a step-down DC to DC converter. The operation of a Buck converter is fairly simple: It uses two switches (a transistor and a diode) and an inductor and capacitor. It alternates between connecting the inductor to source voltage to store energy in the inductor and discharging the inductor into the load. Refer to figure “Principle of Buck Converter”.



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Figure 9-6 Principle of Buck Converter

Figure “Buck converter - application” describes the application which is used in this platform.



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Figure 9-7 Buck converter - application

In diagram A3 the DC-DC converter which is built around the Buck converter is depicted. In this application, the controller (item 7401) controls the gate driver (built around item no. 7403, 7404, 7405 and 7407). Transistor 7403 switches the gate of the MOSFET (item 7402) “on”, and 7405 switches it “off”. Transistors 7404 and 7407 avoid cross-conductance of the driver. The output of the gate driver circuitry can be measured at testpoint I604. An “low-voltage lock-out” circuitry is built around item no. 7406 and activates when the input voltage of +18 V drops below 15 volt.

An over-voltage protection circuitry is built around item no. 6020 and 6018 and will activate if the feedback circuitry is defect (see diagram A2).
A primary over-voltage protection is performed by item no. 7307 (opto-coupler) (see diagram A1) and will activate in case the primary input voltage (mains) is too high. The software will detect an incorrect signal on the Power-Good line and the TV will go into protection.
An secondary over-current protection circuitry is built around item no. 2014 and 3021 (diagram A2). If a short-circuit occurs in the output circuitry (+12 V, +24 V), the switching frequency of the DC/DC converters will increase. This means that the soft-start voltage on pin 11 of the resonant mode controller (item 7001) will be “low” and the output current will reduce.

The following signals interface with the SSB via connector 1P11 (see diagram A2):
- DIM-control: adjusts backlight intensity (pulse-width modulated signal of 3.3 V).
- Power-Good (described above).
- Light on_off: switches the LCD backlight (0 - 3.3 V).
- Boost (fixed: or 3.3 V or left “open” depending on commercial request or display specification).
- Stand-by: stand-by signal and 5.2 V from SSB to switch relay on Power Supply Unit on/off.

9.2.2 47 and 52" Sets

The 47 and 52" sets in this chassis come with a buy-in Sanken Display Supply unit and is a black-box for Service. When defective, a new panel must be ordered and the defective panel must be sent for repair, unless the main fuse of the panel is broken. Always replace a defective fuse with one with the correct specifications! This part is available in the regular market.
The supply unit works together with the on-board platform supply (see section “On-Board Platform Supply”).

The supply unit in this platform has an output voltage of +24 V. Refer to the Spare Parts list for the correct order number.

The supply unit delivers the following voltages to the chassis:
- Mains voltage (filtered) for SSB (connector 1P02)
- +395 V DC (connector 1P22).
- +24 V DC (connectors 1319/1316).
- +12 V DC on connectors 1M09, 1M12 and 1P15.

When all these voltages are present, the Power-Good signal becomes “high” (+5 V) (connectors 1P10.2 and 1P11.2).

9.3 On-Board Platform Supply

In this platform, an on-board platform supply has been foreseen. This means that the mains voltage, after filtering, is fed to the SSB.

The supply is a Self Oscillating Power Supply (SOPS) and working according to the Quasi Resonant Conversion (QRC) principle. Refer to diagrams B01A and B01B for details. For the on-board DC/DC converters refer to diagrams B02A, B02B and B02C.

9.3.1 Start-up sequence

When the main supply is switched “on”, the voltage across capacitor 2B50 increases. This will trigger the gate of MOSFET 7B05 (via resistors 3B60 and 3B34). When the voltage on pin 1 of the MOSFET reaches the threshold level, the MOSFET starts conducting. As result, current will flow in the primary winding of transformer 5B01. The output voltage increases but the supply will not start oscillating because the auxiliary voltage is still too “low” to drive the MOSFET autonomously. Oscillating will start only when then auxiliary voltage across capacitor 2B32 is high enough to drive the gate of the MOSFET. This brings the supply in SOPS mode (self-oscillating).

9.3.2 Reduced / Maximum Power Mode

When there is no overload and when the supply has reached SOPS mode, the start-up power consumption is limited to approximately 1 A in order to ensure a slow start current control across the MOSFET. This will last as long as diode 6B14 is not (yet) conducting while transistor 7B01 is conducting, thus keeping the supply in Reduced Power Mode.

In general, the “on” time of the transistor 7B05 is a function of the output current. Resistor 3B51 can be seen as sense resistor with a voltage of V_{drop}. If there is a demand for more power, the negative voltage created from the auxiliary winding and diode 6B11 will cause diode 6B14 and transistor 7B01 to conduct. Transistor 7B01 will put resistor 3B49 in parallel to resistors 3B50 and 3B51. This will result in V_{drop} across resistor 3B51 to be lower, which causes the “on” time of transistor 7B05 to be longer, which enables the supply to deliver more power. This brings the supply in Maximum Power Mode.

9.3.3 Peak current control

The peak start-up current flowing across the MOSFET also influences the voltage across the sense resistor 3B51 and will cause transistors 7B02 and 7B00 to conduct (via resistor 3B50). The voltage across this resistor is sensed in order to control the maximum power.

9.3.4 Output voltage control

The voltage at the +12 V output supply line will increase until the zener voltage of diodes 6B02 and 6B13 is reached. The output voltage is controlled via a feedback-loop formed by components 3B54, 6B02, 6B13, 7B04, 3B47, 7B02 and 7B00. When the voltage exceeds 12.6 V the zener diodes 6B02 and 6B13 will conduct and will trigger opto-coupler 7B04. After a while transistors 7B02 and 7B00 will start to conduct and this will switch “off” MOSFET 7B05. The feedback-loop will become stable after a while, thus controlling the output voltage.

9.3.5 Over-voltage protection

In case of malfunctioning of the output voltage control feedback-loop as described above, the supply goes into over-voltage protection. When the negative primary auxiliary voltage (present at the anode of diode 6B11) reaches the zener voltage of diode 6B03, MOSFET 7B05 will switch off. This causes transistors 7B02 and 7B00 to conduct which will result in an output voltage drop.

9.3.6 Audio protection / DC protection

When a fault occurs in the audio amplifiers (e.g.a short-circuit), a voltage is sent via the AUDIO-PROT line which will trigger thyristor 7B50. This will cause the +12 V output line to drop to approximately +3 V. The only way to reset the thyristor is to disconnect the set from mains. After re-connect to mains, the supply will restart normally, if the defective audio amplifier has been repaired.

9.3.7 Service Tips

After replacing some components in the primary circuit of the Power Supply, a variable transformer has to be used to ramp up the mains voltage from 0 to 30 V. This will result in the Power Supply to start-up. Monitor the +12 V output voltage and increase the mains voltage until the regulation and feedback loop are working.

Connector 1B40 can be used by Service to power the SSB directly by an external power supply. This enables the SSB to start-up without the use of the LCD Power Supply. The power consumption of the SSB is:

- 1.5 to 2.0 A for the +12 V line.
- 2.0 A for the +5 V line.

It should be noted that, by using this method, the audio amplifier and the audio protection are not tested!

9.4 On-board DC/DC Converters

In this platform, on-board DC/DC converters have been foreseen. See also diagrams B02A, B02B and B02C.

9.4.1 PSU Start-up Sequence

1. If the input voltage of the DC/DC converters is around 12 V (measured on the de coupling capacitors 2U01/2U02/ 2U93) and the ENABLE signals are “low” (active), then the output voltages should have their normal values.
2. First, the Stand-by Processor activates the +1V2 supply (via ENABLE-1V2).
3. Then, after this voltage becomes present and is detected OK (about 100 ms), the other voltage of +3V3 will be activated (via ENABLE-3V3).
4. The current consumption of controller IC 7U00 is around 20 mA (that means around 200 mV drop voltage across resistor 3U01).

9.4.2 +12V Switch

- The +12V switch is activated when the POD-MODE signal is “low”.
- The rise time of the output voltage is set by components 2U12, 3U42, and 3U64 and is about 30 ms.
- The switch “off” is fast, because there can be fault currents that must be interrupted.
- When the input voltage (+12VS) is higher than 12.6 V, the switch is disabled via circuit 6U01, 3U09, 3U18, 2U14, and 7U14-2.

9.4.3 Internal Protection

- Provides a SUPPLY-FAULT signal (active “low”), when the output voltage of any DC/DC converter is out of its limits (± 10% of the normal value). In such cases, the Stand-by Processor will immediately stop the supplies by sending a “high” control signal towards the external and internal supplies: ENABLE-xVx, POD-MODE, ON-MODE, and STAND-BY.
  Note: The SUPPLY-FAULT control signal is “low” when any DC/DC converter is disabled by its control signal (ENABLE-xVx) and +12VSW is present, therefore it is ignored during start-up!
- The internal protection works together with the output over-voltage detector transistors 7U15-1, 7U15-2, 7U29-1, and 7U29-2.

9.4.4 1.2V and 3.3V DC/DC Converters

Introduction
The circuit used is a so-called “synchronous buck converter”. Some characteristics:

- Switching frequency: approximately 250 kHz.
- Efficiency: approximately 90%.
- Built-in output over-voltage and over-current protections
- Soft start.
- Software controlled “on/off” (via ENABLE line).

Block diagram

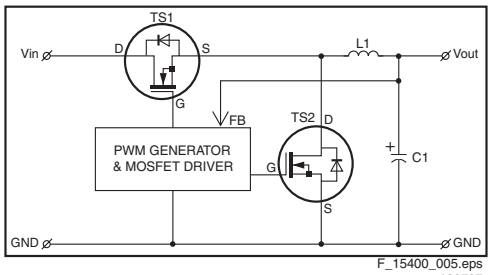


Figure 9-8 Block diagram synchronous buck converter.

The advantage of a “synchronous buck converter” over a “classical buck converter” is its better efficiency (about 90%). The difference between the two is that in a synchronous buck converter the “low -side” diode is replaced by a MOSFET TS2 (item 7U03). This, because the voltage drop across a MOSFET is smaller than the forward voltage drop of a diode.
This second MOSFET TS2 conducts current during the “off” times of the first MOSFET TS1 (item 7U01 at the input side). The upper MOSFET TS1 conducts, to transfer energy from the input to the inductor L_1 and load R_L, while the lower MOSFET TS2 conducts to circulate the inductor current (free wheel). The synchronous PWM control block regulates the output voltage by modulating the conduction intervals of the upper and lower MOSFETs.

PWM Generator and MOSFET Drivers
This circuit is a one-chip solution (item 7U00). It contains all the circuitry for two independent buck regulators (3V3 and 1V2). The MOSFETs 7U01, 7U06, 7U03 and 7U08 are the switching transistors, they are conducting alternatively.

- Time sequence 1: 7U01/7U06 is conducting; energy is stored in coil 5U01/5U02. The current is flowing from the +12VSW power supply source.
- Time sequence 2: 7U01/7U06 is blocked; energy is stored in coil 5U01/5U02.
- Time sequence 3: 7U03/7U08 is conducting, and the current circuit is now closed via 7U03/7U06, 5U01, 5U02, 2U09/2U94/2U21/2U90/2U921/2U92, and the load. So the energy stored in the coil during time sequence T1 is consumed during sequence T3. The signal on the gate 7U03/7U08 is 180 degrees turned compared with the signal on the gate 7U01/7U06.

Voltage Booster
This circuit is build around capacitors 2U29 and 2U26, resistor 3U62/3UA1, diodes 6U06 and 6U04, and transistor 7U07.
It generates the +18 V boost voltage on pin 4 of item 7U00, to drive the “high-side” power MOS-FET 7U01/7U06. The voltage is generated only during normal operation of the converter; therefore, any drop in its value means an internal fault condition, which is sensed by the internal protection circuit.
The AC component of the voltage on the source of transistor 7U01/7U06 is rectified by the diodes and added to the input voltage, resulting into the boost voltage. The resistor 3U62/ 3UA1 limits the peak current through the rectifier diodes.

Over-current Detection
Over-current detection is done via components 3U33, 3U26, 3U27, 3U31, and 2U18 for the 3.3 V converter and 3U43, 3U36, 3U37, 3U40, and 2U20 for the 1.2 V converter.

Under-voltage Detection
There is an additional circuit (7U10 and 7U11) to switch “off” the 3.3 V converter in case the +12VS drops below 9 V.

Service Tips

- When a power MOS-FET is found defective, replace the other power MOS-FET as well.
- For a normal operation of the converter, it is important to check the switching frequency and the value of the boost voltage.

9.5 Front-End

Refer to figure “Architecture of TV520 platform” earlier in this chapter for details. Refer also to block diagrams B03A, B03B and B04.

9.5.1 Device specifications

Tuner (TD1736)
The tuner has the following specifications:

- Hybrid tuner with asymmetrical IF output.
- Down conversion from RF to IF frequency (picture carrier 46.125 MHz at analog reception, centre frequency 44 MHz at digital reception).
- AGC control signal is coming from master IF device (TDA9897).
- Only 5 V external supply needed (internal DC-DC conversion to 3.3 V).
- Internal PLL synthesizer (XTAL running on f = 4 MHz).

The application in this chassis is as follows:

- I^2C address C0.
- FM trap, no broadband AGC, no IF section, no OOB.
- I^2C communication buffered via MUX.
- 4 MHz output that is being used by Master IF.
- Gain to obtain optimized Master IF input level; control signal is coming from Master IF.
- Output level ca. 110 dBµV (for strong input signal).

Master IF (TDA9897)
The Master IF device has the following specifications:

- CVBS output.
- SIF/LIF output.

The application in this chassis is as follows:

- I^2C address 0x86.
- Down conversion from IF to low-IF frequency (4 MHz centre frequency).
- Advanced filtering (for further rejection of adjacent channels).
- Gain to obtain optimized channel decoder level. Control signal is coming from channel decoder.

SAW filter

X6931D

- Analog sound for NTSC-M.
- ATSC/QAM (digital reception sound **and** video).

For digital reception. the application in this chassis is as follows:

- Rejection of adjacent channels.
- Switching is done by Master IF (3 inputs).

X6767D

- Analog video NTSC.

Channel decoder (TDA10060)
The channel decoder has the following specifications:

- I^2C address 0x1E.
- Decoding from low-IF to MPEG transport stream.
- During decoding: de-modulation, de-interleaving and error correction.
- External 54 MHz Xtal required.
- AGC monitor.

9.5.2 Analog signal processing (front-end)

Refer to figure “NTSC video broadcast reception block diagram” and “NTSC audio broadcast reception block diagram” for details of analog signal processing.

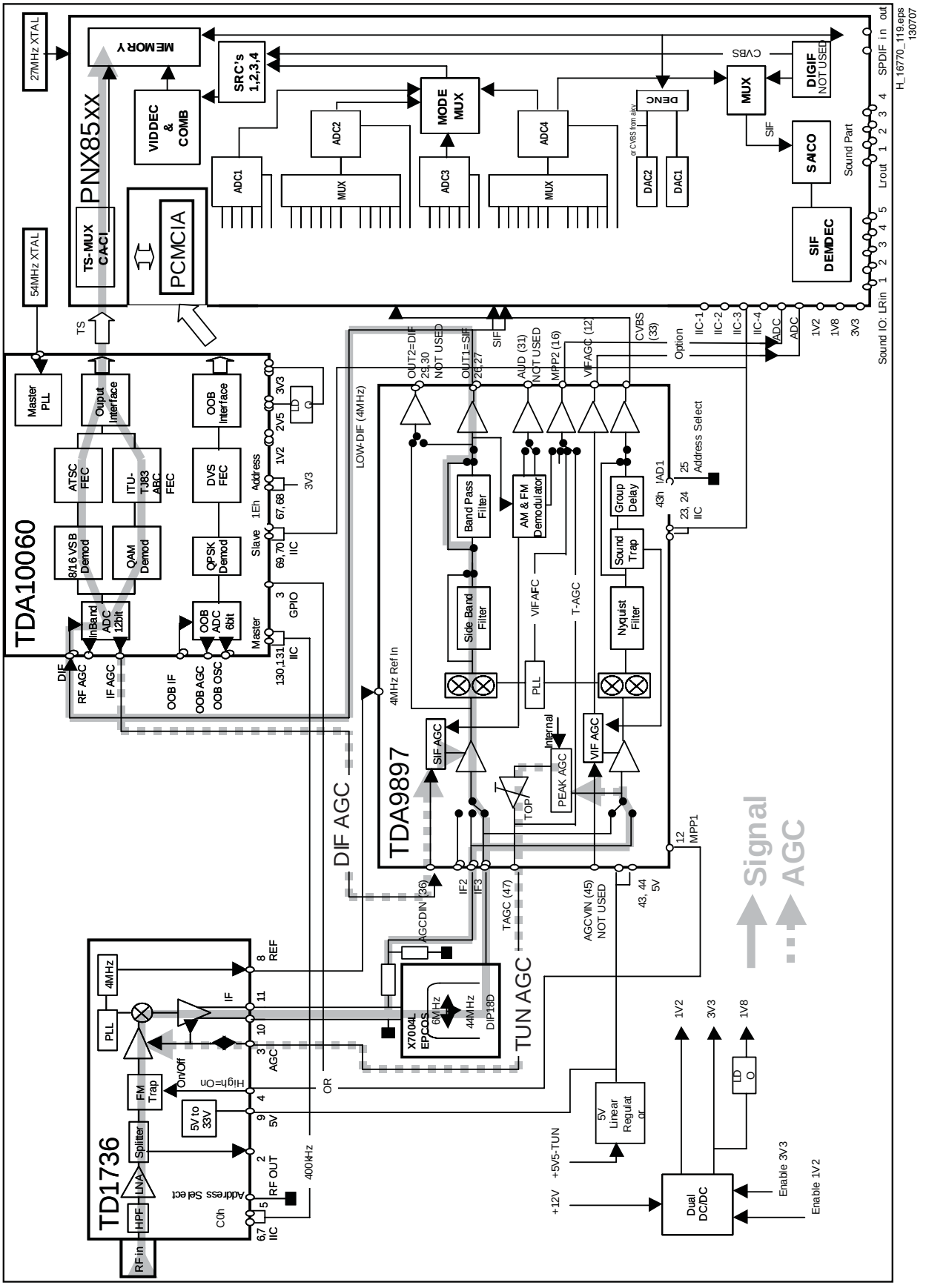


Figure 9-9 NTSC (analog) video broadcast reception block diagram

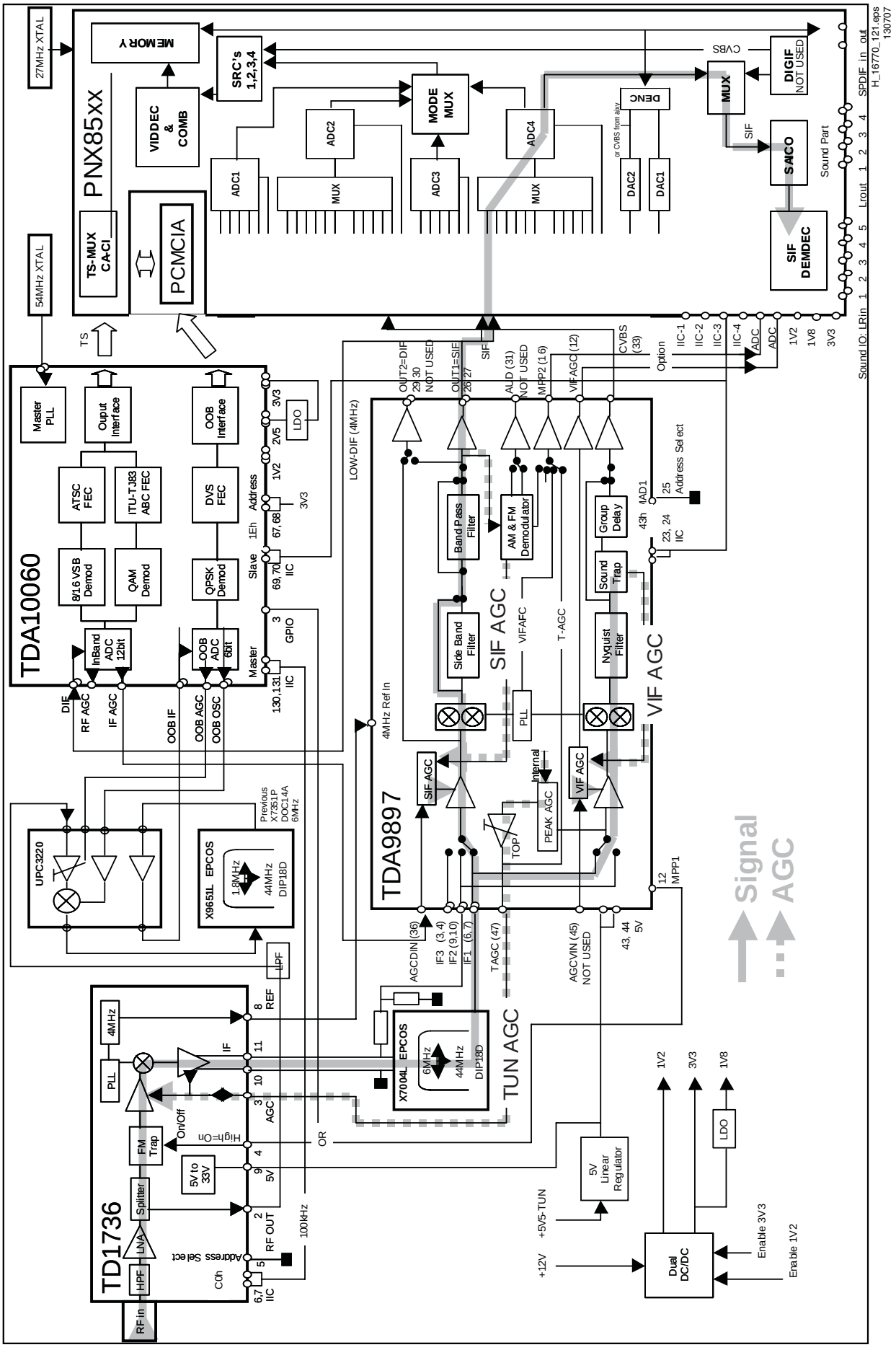


Figure 9-10 NTSC (analog) audio broadcast reception block diagram

9.5.3 Digital signal processing (front-end)

Refer to figure “ATSC signal broadcast reception block diagram” for details of digital signal processing.

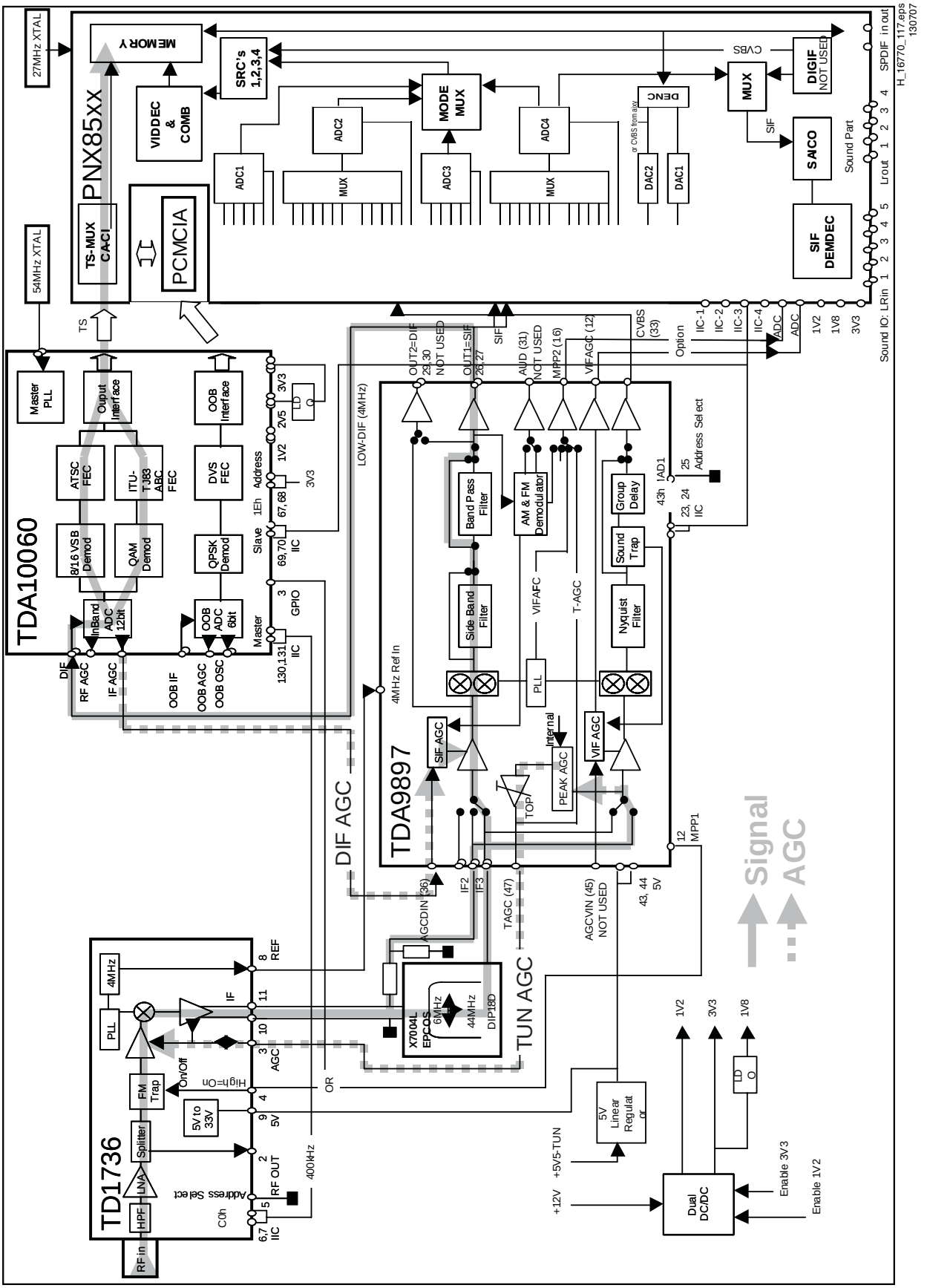


Figure 9-11 ATSC (digital) signal broadcast reception block diagram

9.6 PNX85xx

In this chassis, the PNX85xx is responsible for the audio/video source decode functions and video improvement processing on both digital and analog sources. It includes a multi-standard digital video decoder for MPEG2, and a multi-standard analog video decoder for support of PAL, NTSC, and SECAM standards. Refer to diagram B04 for details.

9.6.1 Video Subsystem

Refer to figure “Video flow diagram” for a clarification of the blocks that are used in this device.

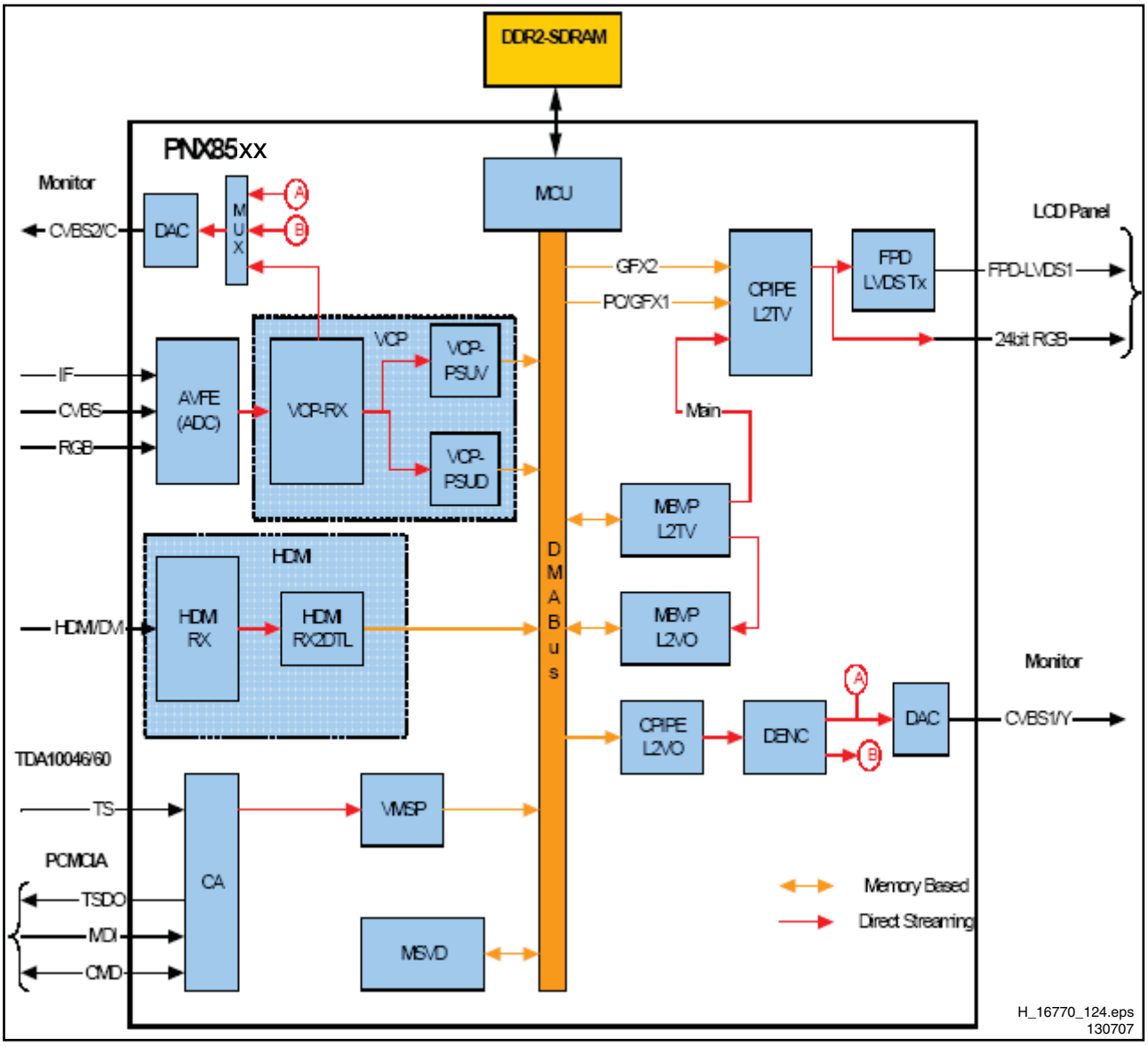


Figure 9-12 PNX85xx video flow diagram

The Analog Video Front-End (AVFE) provides the interface to external analog baseband video sources and IF inputs. It supports the following inputs:

- 1fh - CVBS, Y/C, YPbPr, RGB.
- 2fh - YPbPr, RGB.
- IF - low-IF, SSIF.

The Video Capture Pipe (VCP) is used to capture analog video inputs and consists of a number of blocks:

- The VCP-RX block that contains digital IF processing, a Video Decoder, a 3D-combfilter, and a VBI-Data Capture unit together with a number of smaller control functions.
- The VCP-PSUD which allows VBI data, such Teletext and Closed Captioning, to be stored in memory.
- The VCP-PSUV which allows captured video data to be stored in memory.

The HDMI receiver interface supports the capture of signals compliant with the HDMI V1.1 specification. It consists of two blocks:

- Block HDMI-RX contains the de-serializer, HDCP, audio and video data capture and info packet extraction, together with audio formatting.
- Block HDMI-RX2DTL allows captured video data to be stored in memory.

The Memory Based Video Processor TV (MBVP_L2TV) is used on the main video channel for de-interlacing and scaling of images, together with video measurement functions.

The Video Composition Pipe TV (CPIPE_L2TV) is used to perform picture improvements on video and merge the video layer and 2 graphics layers into a single stream.

The Flat Panel DIsplay-LVDS (FPD-LVDS) provides a serial interface for 10-bit RGB output data towards the LCD panel with a data rate of 90 Mpixels/s max.

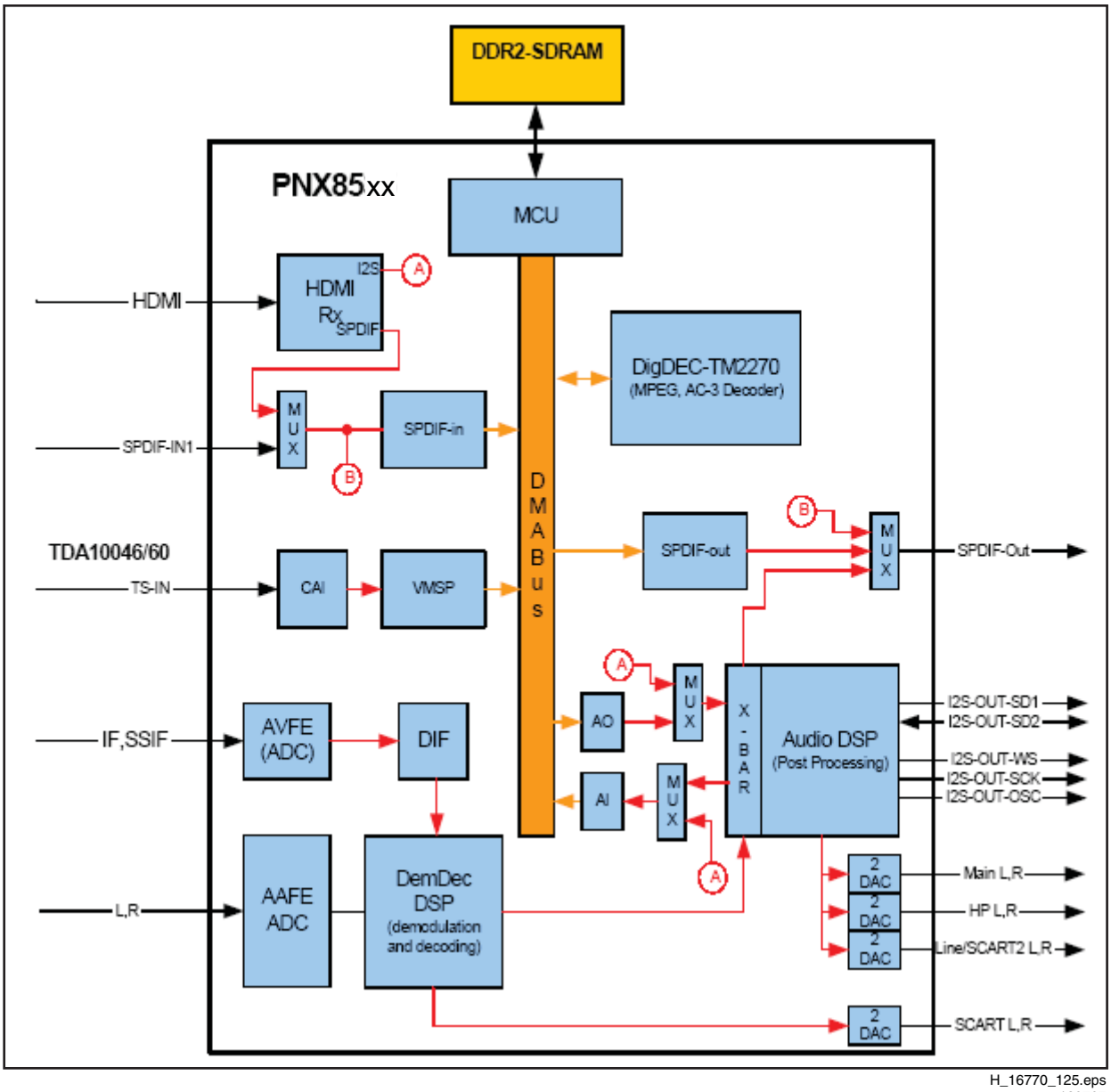
The Memory Based Video Processor VO (MBVP_2LVO) is used on the main video channel for scaling of images for monitor out.

The Video Composition Pipe VO (CPIPE_VO) is used to merge a video and a graphics layer into a single stream together with insertion of VBI and CGMS data.

The Digital Encoder (DENC) supports encoding of a digital video stream from the CPIPE_VO into Analog CVBS or Y/C.

9.6.2 Audio Subsystem

Refer to figure “Audio flow diagram” for a clarification of the blocks that are used in this device.



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Figure 9-13 PNX85xx audio flow diagram

The Analog Audio Front-End Input (AAFE) block is used to capture Baseband Audio Inputs.

The Sony/Philips Digital Interface (SPDIF) input is used to get compressed data into the system memory. The multiplexer in front of the block allows two possible sources of SPDIF signals.

The SPDIF Output is used to generate either PCM data or a compliant IEC-61937 compressed stream containing MPEG/ Dolby Digital format.

The Audio Input (AI) block is used to transfer stereo audio (I^2S channel) from the Audio DSP into the system memory for "lip-sync" delay.

The Audio Output (AO) block supports output of up to four stereo I^2S channels. The AO is used to transfer data from the system memory to the Audio DSP, for post processing of the signal at a sampling frequency of 48 kHz (max.).

Demodulation & Decoding DSP is used for demodulation and decoding of all analog terrestrial TV sound standards that the TV520 platform covers.

The Audio Post-Processing DSP supports DPLII together with volume and tone control, spatializers, and equalizers for 6 channels (max.)

Digital Audio Decoder DSP is used to decode digital compressed streams such as MPEG and AC-3. This runs as SW Codecs on the AV-DSP.

9.6.3 Audio-Video Codec Subsystem

The AV Codec subsystem consists of the modules required to capture and de-scramble Transport stream inputs together with decoding of Audio/video Streams. Refer to figure "PNX85xx video flow diagram" for a clarification.

The sub-system consists of the following modules:

The Conditional Access Interface block provides a direct interface towards a PCMCIA socket for Conditional Access. It supports both the DVB CI-CA Specification and the CableCard (POD) Interface.

The MPEG System Processor (VMSP) provides parsing an MPEG-2 transport stream, including de-scrambling, de-multiplexing and appropriate routing of data to the memory.

The Video MPEG Decoder (VMPG) performs MPEG2 decoding for both MP@ML and MP@HL streams.

9.6.4 Control and Compute Subsystem

Refer to figure "Control and compute subsystem" for a clarification of the blocks that are used in this device.

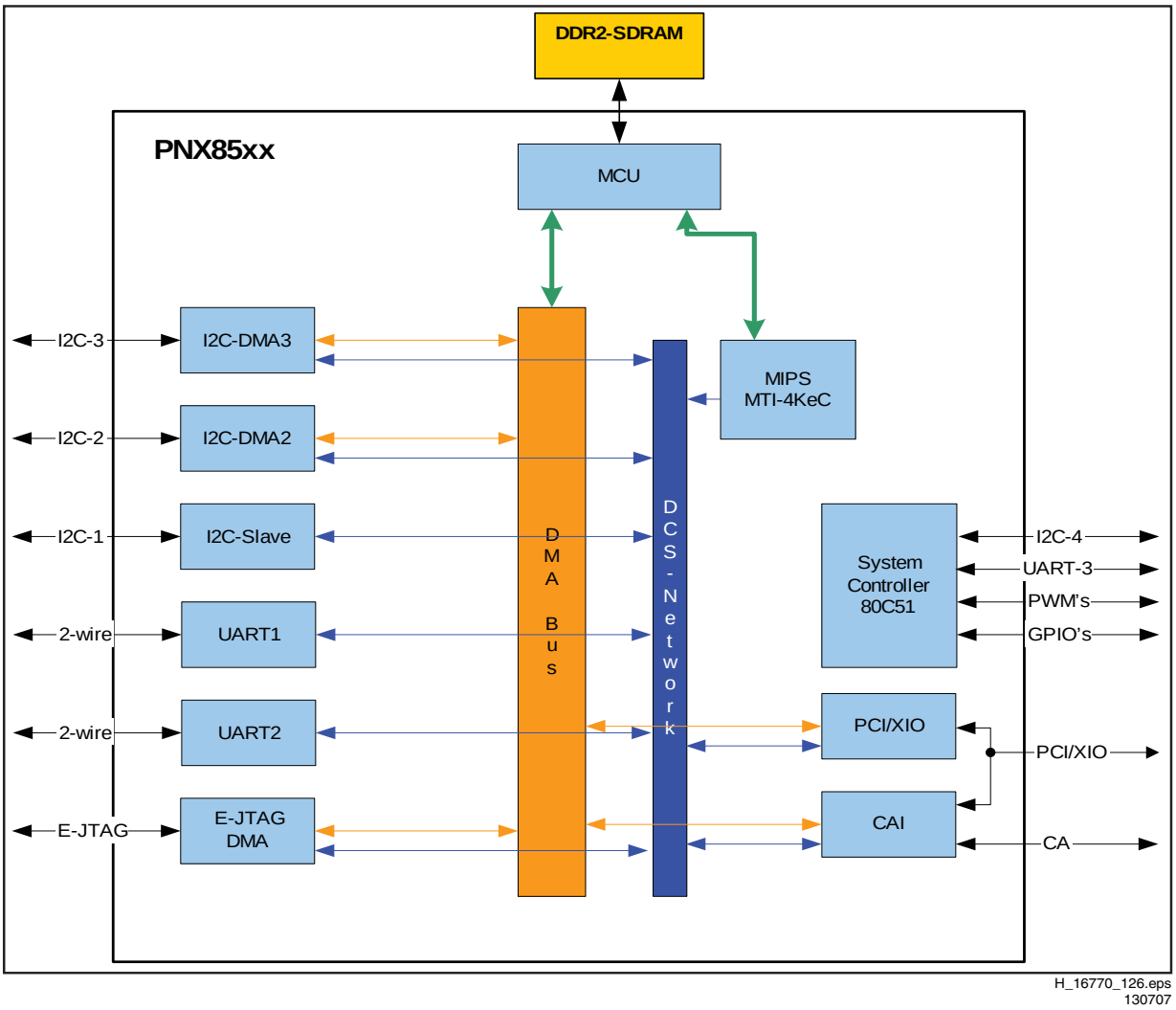


Figure 9-14 Control and compute subsystem

The Control and compute subsystem consists of the main processor, control peripherals and the memory system.

The MIPS 4KEc is a 32-bit MIPS RISC core. It has direct access to connectivity peripherals to support system features via PCI, I^2C, UART or General Purpose I/O. A JTAG interface provides processor software debug capabilities.

The Memory Control Unit (MCU) is a 32-bit DDR2 SDRAM interface supporting DDR2-533 with an address range of 128 MB (max.).

The PCI/XIO interface supports PCI Rev2.2 and can be used to access 8/16-bit external NAND-Flash memory.

The Conditional Access Interface supports direct control and communication to the PC-Card attached to a PCMCIA interface. The interface supports the DVB CI-CA and CableCard specification.

9.7 Back-end

Refer to figure “Architecture of TV520 platform” earlier in this chapter for details. Refer also to block diagrams B04, B05 and B06.

Table 9-1 Back-End key component overview

Specification	Processing	Picture enhancement	DFI panel
HD @ 60 Hz	Cyclone	Pacific	no
HD @ 120 Hz			
fHD @ 60 Hz			
fHD @ 120 Hz			yes

9.7.1 HD sets @ 60 Hz

In HD sets (60 Hz), the output signal coming from the PNX85xx is fed to the PACIFIC3 via a single LVDS connection; the PACIFIC 3 also drives the AmbiLight units. The PACIFIC 3 also generates the pulse-width modulated signal needed for the “Dimming Backlight” feature, which ensures additional motion sharpness. As some displays require an analog signal to switch the LCD, a multiplexer is added to transform the pulse-width modulated signal. An additional signal, coming from the PNX85xx, makes the selection between analog and pulse-width modulation, depending on which display is used. Scanning Backlight displays require an analog signal, and all other displays a pulse-width modulated.

Refer to figure “Block diagram display control HD sets 60 Hz”.

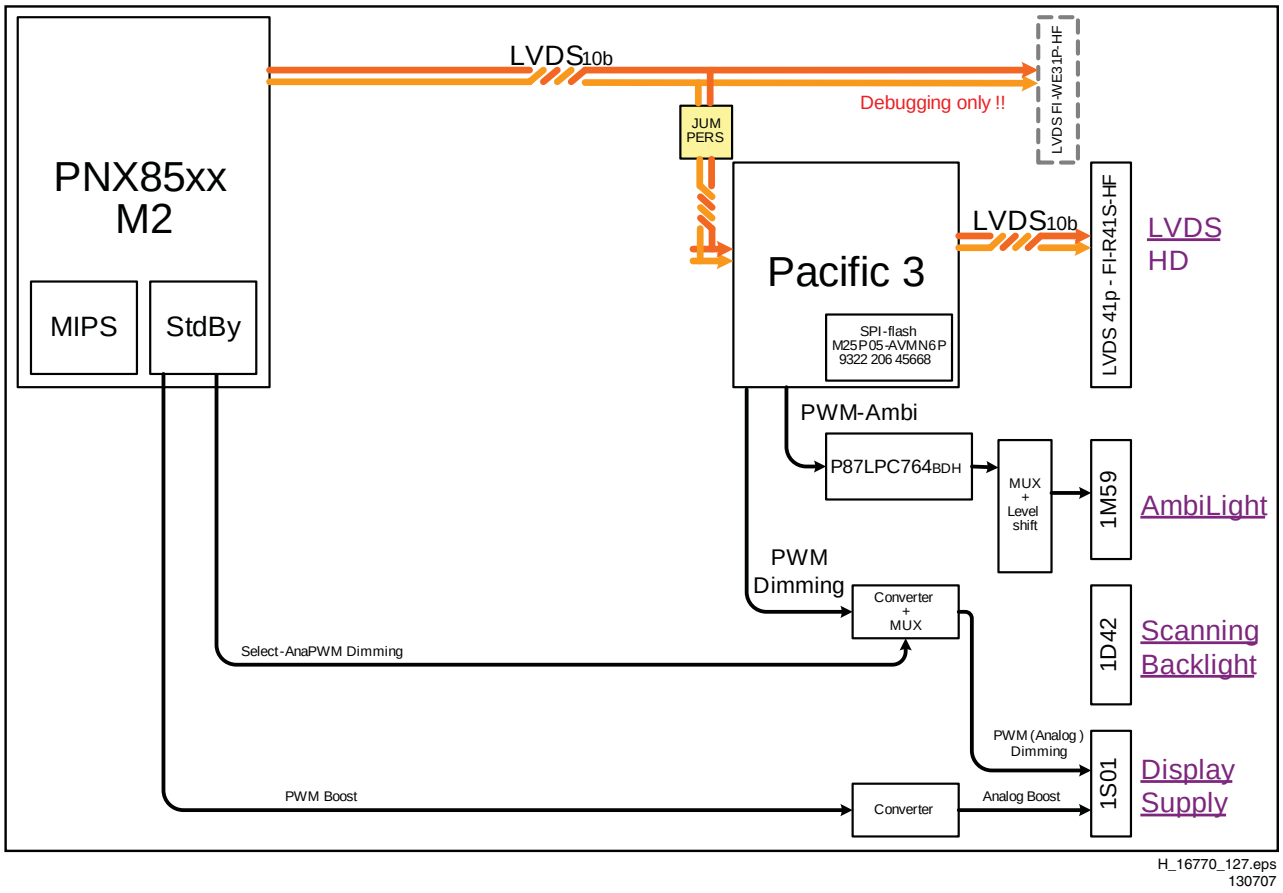


Figure 9-15 Block diagram display control HD sets 60 Hz

9.7.2 Full-HD sets @ 60 / 120 Hz

In full-HD sets @ 60 Hz, the output signal coming from the PNX85xx is fed to the PACIFIC3 via a single LVDS connection. In full-HD sets @ 120 Hz, the YUV output signal coming from the PNX85xx is fed to the CYCLONE II FPGA and then connected to the PACIFIC 3 via a double LVDS connector. The CYCLONE II FPGA drives the AmbiLight units via I^2C. The PACIFIC 3 also generates the pulse-width modulated signal needed for the “Dimming Backlight” feature, which ensures additional motion sharpness. As some displays require an analog signal to switch the LCD, a multiplexer is added to transform the pulse-width modulated signal. An additional signal, coming from the PNX85x, makes the selection between analog and pulse-width modulation, depending on which display is used. Scanning Backlight displays require an analog signal, and all other displays a pulse-width modulated. The signal for “Scanning Backlight” is an I^2C signal coming from the PNX85xx.

Refer to figure “Block diagram display control Full-HD sets 60 / 120 Hz”.

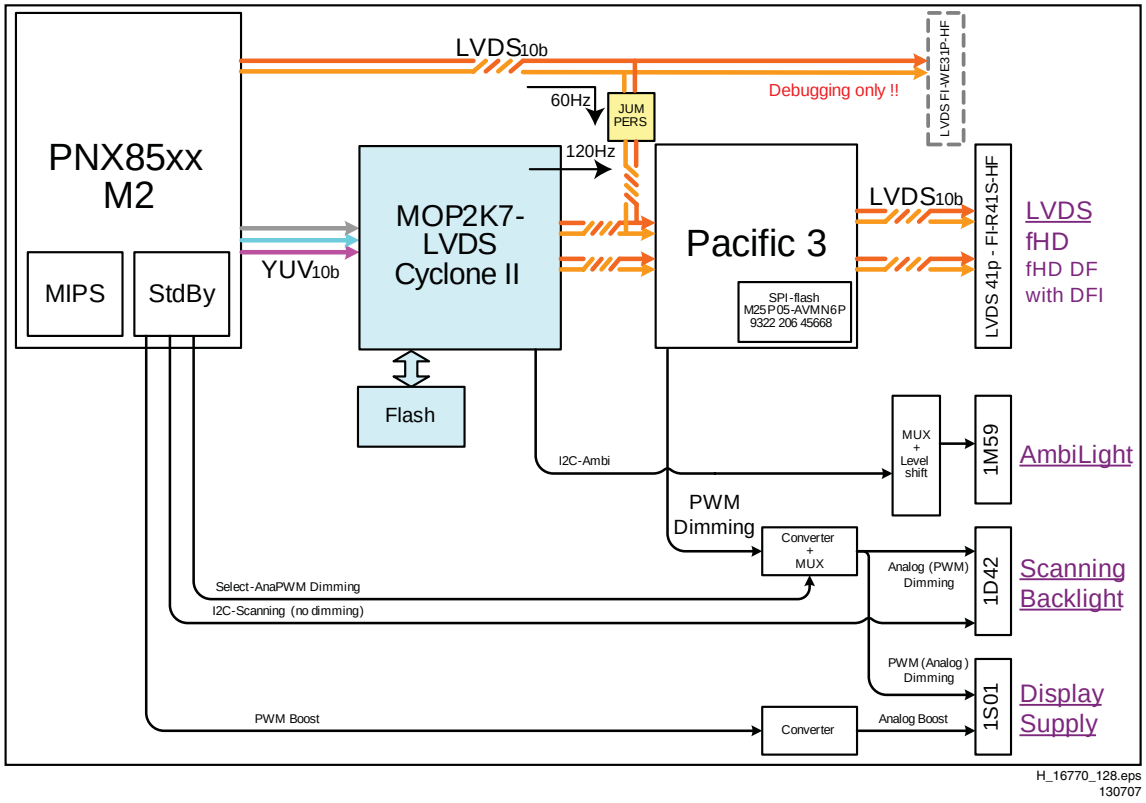


Figure 9-16 Block diagram display control Full-HD sets 60 / 120 Hz

9.7.3 Back-End signal processing

PNX85xx

For sets where the PNX85xx outputs LVDS to the PACIFIC 3, refer to figure “PNX85xx LVDS interface to PACIFIC 3” for details.

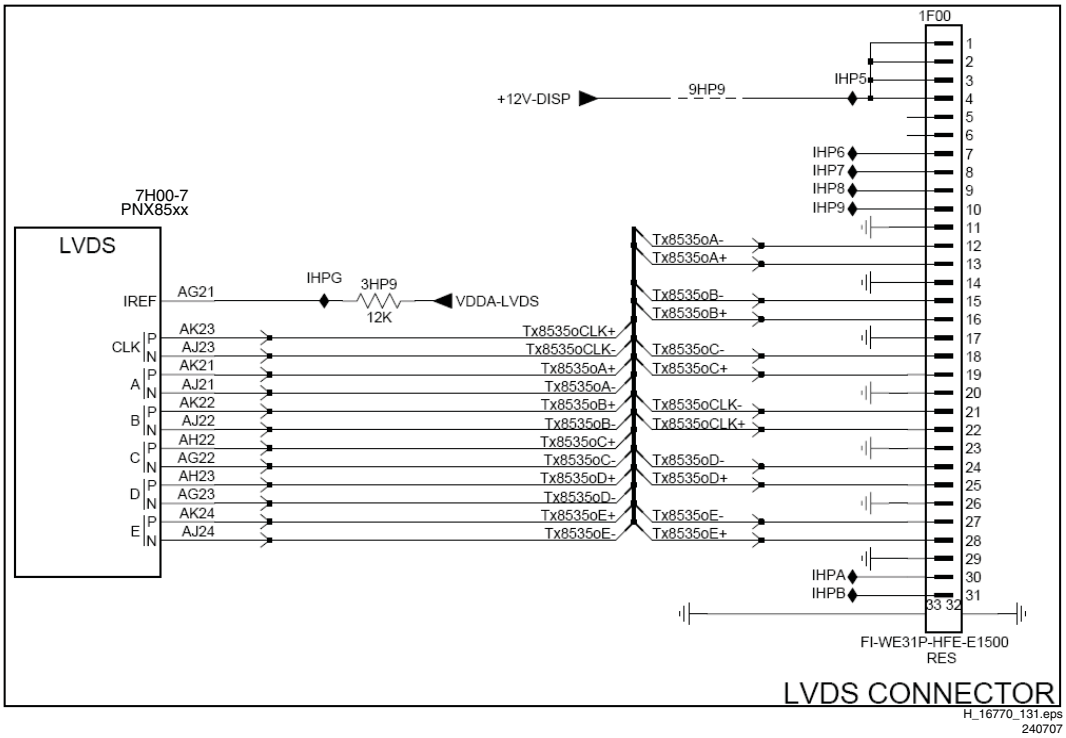


Figure 9-17 PNX85xx LVDS interface to PACIFIC 3 (diagram B04O)

For sets where the PNX85xx outputs CMOS to the PNX5050 or CYCLONE II (EP2C8F256C7N), refer to figure “PNX85xx CMOS interface to PNX5050 or CYCLONE II” for details.

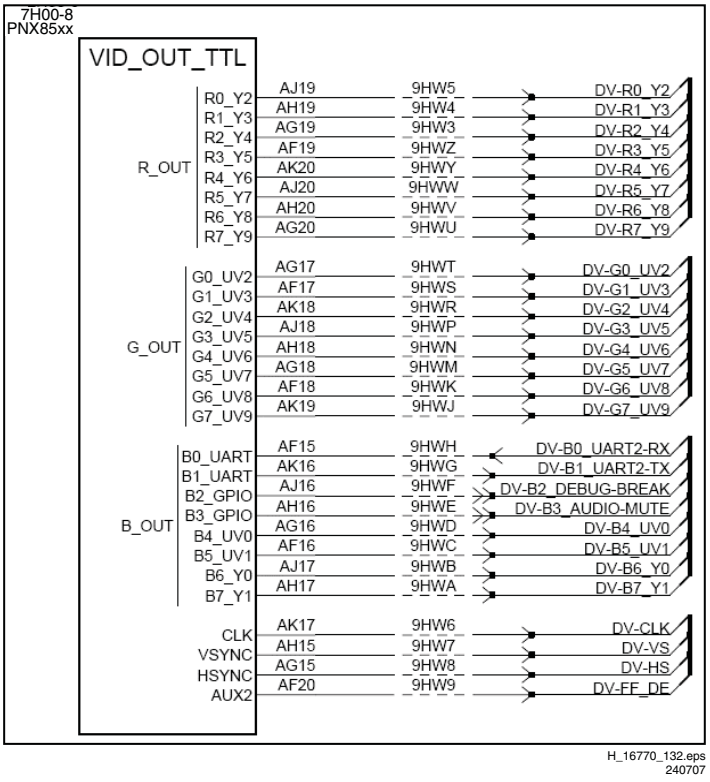


Figure 9-18 PNX85xx CMOS interface to CYCLONE II (diagram B04O)

CYCLONE II FPGA (MOP) (EP2C8F256C7N)

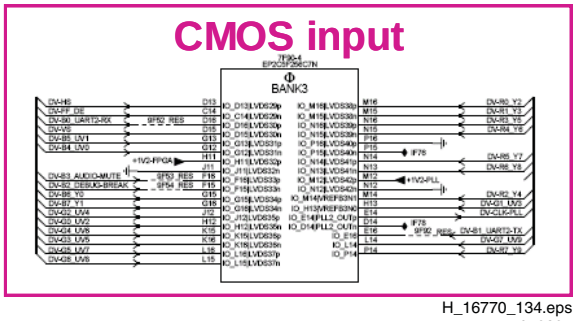
The CYCLONE II performs the following tasks:

- Conversion from CMOS (YUV) to LVDS.
- AmbiLight.
- Pattern generator.

The CYCLONE II interfaces:

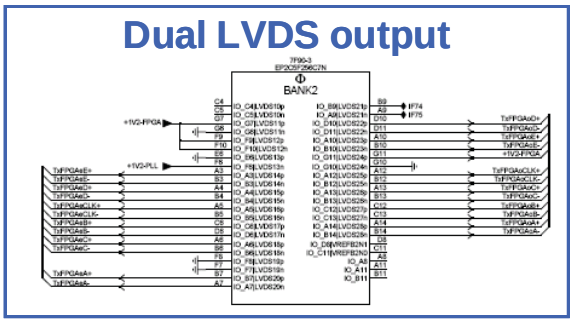
- Video input (single CMOS in) and output (dual LVDS out).
- AmbiLight output (I^2C).
- I^2C input control (from PNX85xx).
- Flash memory.

Refer to figures “CYCLONE II CMOS input interface”, “CYCLONE II dual LVDS output interface” and CYCLONE II “I^2C AmbiLight interface” for details about interfacing.



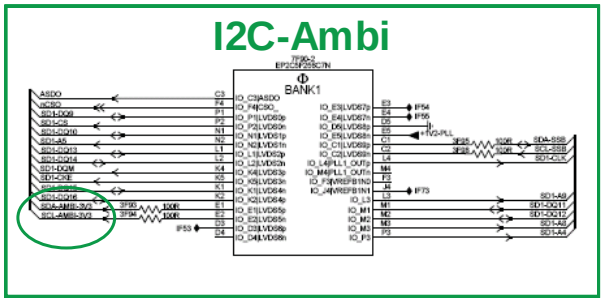
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Figure 9-19 CYCLONE II CMOS input interface (diagram B05C)



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Figure 9-20 CYCLONE II dual LVDS output interface (diag. B05C)



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Figure 9-21 I^2C AmbiLight interface (diagram B05C)

The CYCLONE II has dedicated DC-DC converters which convert the 3.3 V coming from the platform DC-DC converters. They generate:

- 2.5 V.
- 1.2 V.

Refer to diagrams B05B and B05C for details.

A configuration flash memory is added (item 7FA3). After start-up and after configuration has been successful, the LED (item 7FA1) lights up during normal operation. Not burning of this LED indicates the absence of the 2.5 and 1.2 V power lines of the dedicated DC-DC- converters, **or** the flash memory is empty, or the flash memory cannot be reached from the CYCLONE II.

PACIFIC 3 (T6TF4HFG)

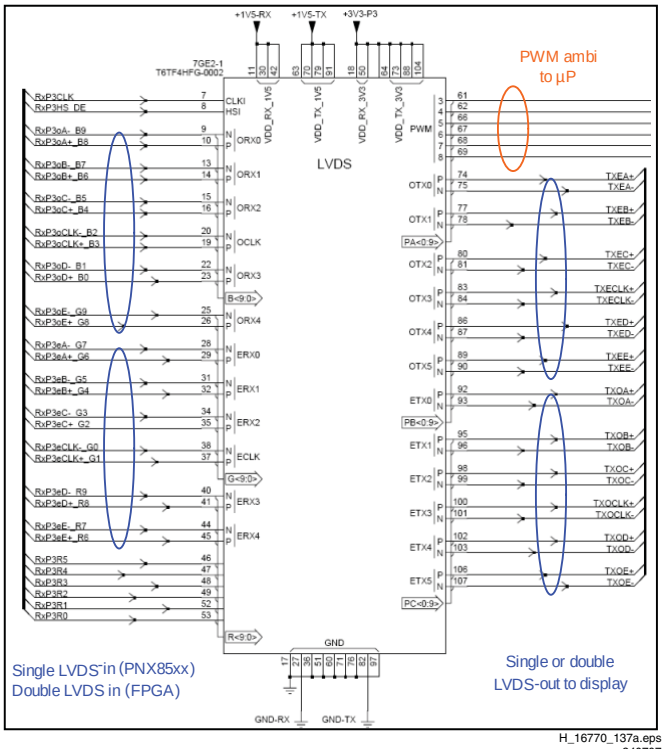
The PACIFIC 3 performs the following tasks:

- Color processing.
- Sharpness improvement.
- Backlight dimming.
- AmbiLight.
- Display (LVDS) switch on/off.
- Pattern generator.

The PACIFIC 3 interfaces:

- Video input:
  - US sets: single LVDS from PNX85xx, dual LVDS from CYCLONE II
  - CMOS from PNX5050
- Video output: LVDS (single or dual) to display **or** DFI panel.
- Backlight dimming: pulse-width modulated (PWM) followed by PWM to I^2C conversion.
- AmbiLight: pulse-width modulated (PWM) followed by microprocessor.

Refer to figure “PACIFIC 3 CMOS + LVDS interface” for details.



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Figure 9-22 PACIFIC 3 CMOS + LVDS interface (diagram B06C)

A configuration flash memory is added (item 7GE1).

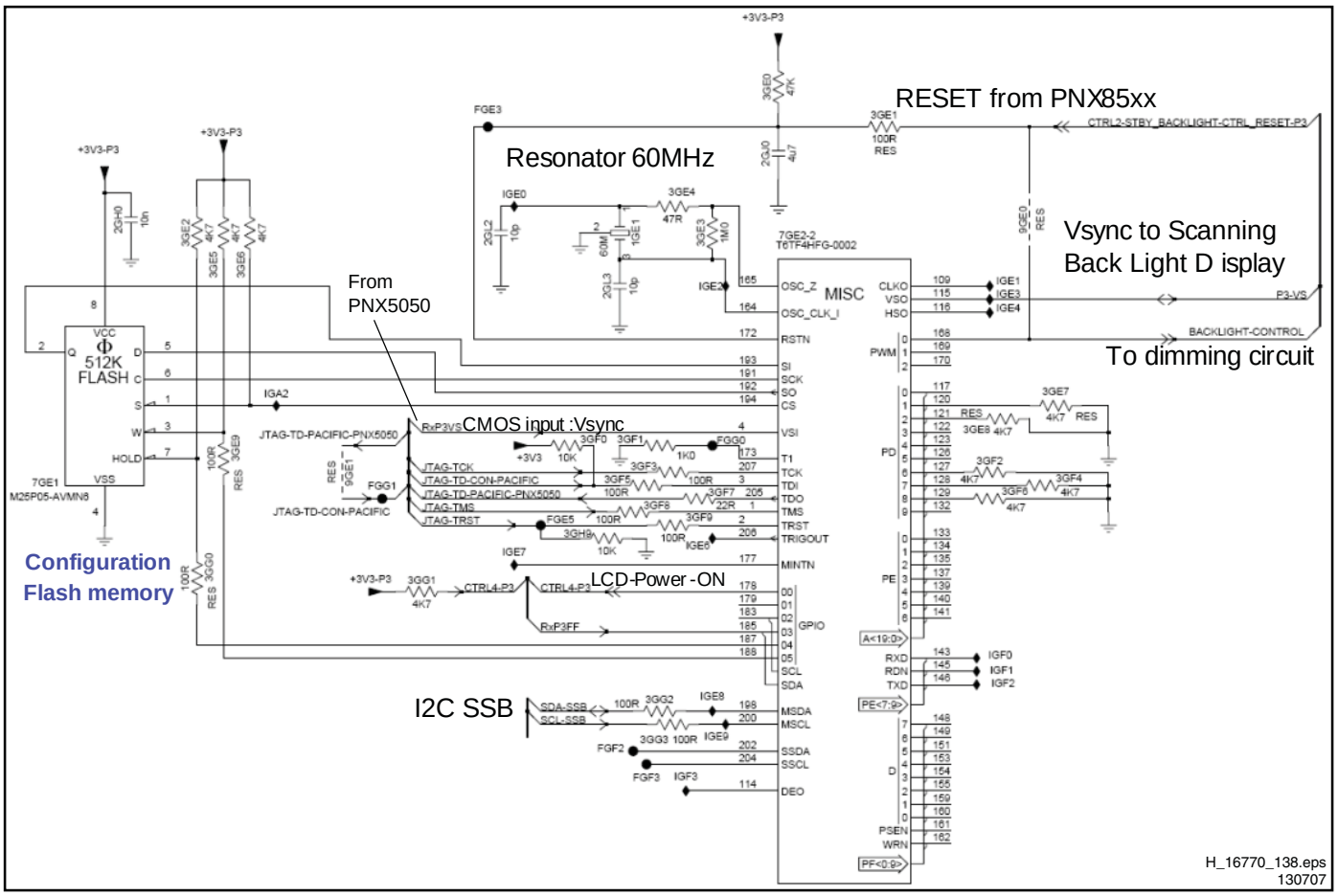


Figure 9-23 PACIFIC 3 control (diagram B06C)

9.8 Ambient Light

In this chassis, LED AmbiLight units are introduced as the successor of CCFL AmbiLight units. The system type that is used is called “UPEC”.
The units are completely aligned in factory and are a “Black Box” for Service. When defective, they must be replaced completely. Refer to the Spare Parts List for the correct order number.

The AmbiLight units for the 42" and 47" sets in this chassis come with 6 LED’s per unit.

The AmbiLight units are addressed by I²C. The I²C-address for all lamp units is “6A”. To address each unit separately, selection lines are needed to distinguish between the boards. Control is done by the SSB. Refer to figure “Ambient Light block diagram” for details.

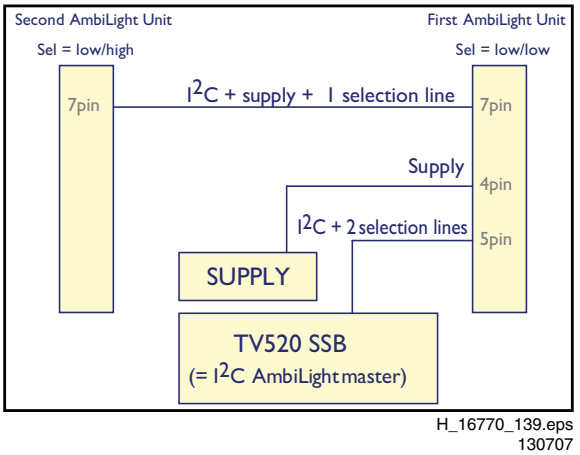
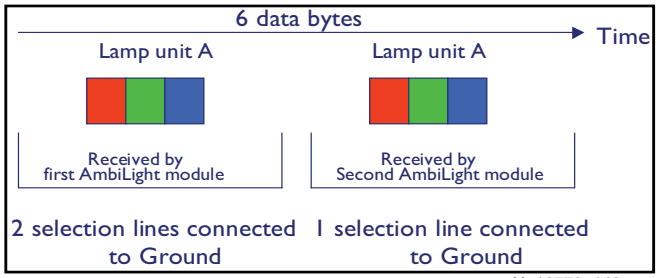


Figure 9-24 Ambient Light block diagram

To address a specific unit, the selection line has to be “low”.

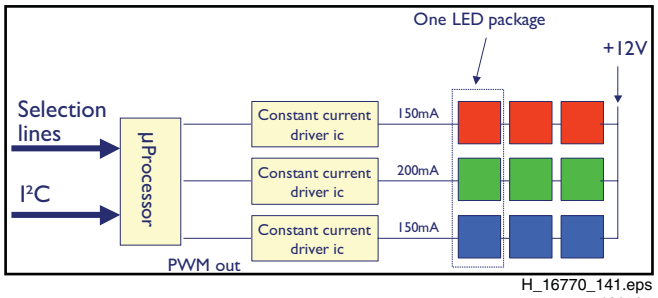
In case of 2-sided AmbiLight, 6 data bytes are used to address the units, 3 bytes for each lamp unit. They are driven by Pulse Width Modulation (PWM). Refer to figure “Lamp unit addressing” for details.



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Figure 9-25 Lamp unit addressing

The driver current is different for the “basic colors” (R, G and B) of each LED package. The “red” and “blue” LED’s of each package need a driver current of 150 mA, the “green” LED need a driver current of 200 mA. Refer to figure “Ambient Light module driving” for details. Each unit need a 12 V supply to drive the LED’s.



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Figure 9-26 Ambient Light module driving

The configuration shown in figure “Ambient Light module driving” is implemented **two** times per module.

9.9 Abbreviation List

0/6/12	SCART switch control signal on A/V board. 0 = loop through (AUX to TV), 6 = play 16:9 format, 12 = play 4:3 format
2DNR	Spatial (2D) Noise Reduction
3DNR	Temporal (3D) Noise Reduction
AARA	Automatic Aspect Ratio Adaptation: algorithm that adapts aspect ratio to remove horizontal black bars; keeps the original aspect ratio
ACI	Automatic Channel Installation: algorithm that installs TV channels directly from a cable network by means of a predefined TXT page
ADC	Analog to Digital Converter
AFC	Automatic Frequency Control: control signal used to tune to the correct frequency
AGC	Automatic Gain Control: algorithm that controls the video input of the feature box
AM	Amplitude Modulation
ANR	Automatic Noise Reduction: one of the algorithms of Auto TV
AP	Asia Pacific
AR	Aspect Ratio: 4 by 3 or 16 by 9
ASF	Auto Screen Fit: algorithm that adapts aspect ratio to remove horizontal black bars without discarding video information
ATSC	Advanced Television Systems Committee, the digital TV standard in the USA
ATV	See Auto TV
Auto TV	A hardware and software control system that measures picture content, and adapts image parameters in a dynamic way
AV	External Audio Video
AVIP	Audio Video Input Processor
B/G	Monochrome TV system. Sound carrier distance is 5.5 MHz
BLR	Board-Level Repair
BTSC	Broadcast Television Standard Committee. Multiplex FM stereo sound system, originating from the USA and used e.g. in LATAM and AP-NTSC countries
B-TXT	Blue TeleteXT
C	Centre channel (audio)
CA	Conditional Access
CEC	Consumer Electronics Control bus: remote control bus on HDMI connections
CL	Constant Level: audio output to connect with an external amplifier
CLR	Component Level Repair
COLUMBUS	color LUMinance Baseband Universal Sub-system
ComPair	Computer aided rePair
CP	Connected Planet / Copy Protection
CSM	Customer Service Mode
CTI	Color Transient Improvement: manipulates steepness of chroma transients
CVBS	Composite Video Blanking and Synchronization
DAC	Digital to Analog Converter
DBE	Dynamic Bass Enhancement: extra low frequency amplification
DDC	See “E-DDC”

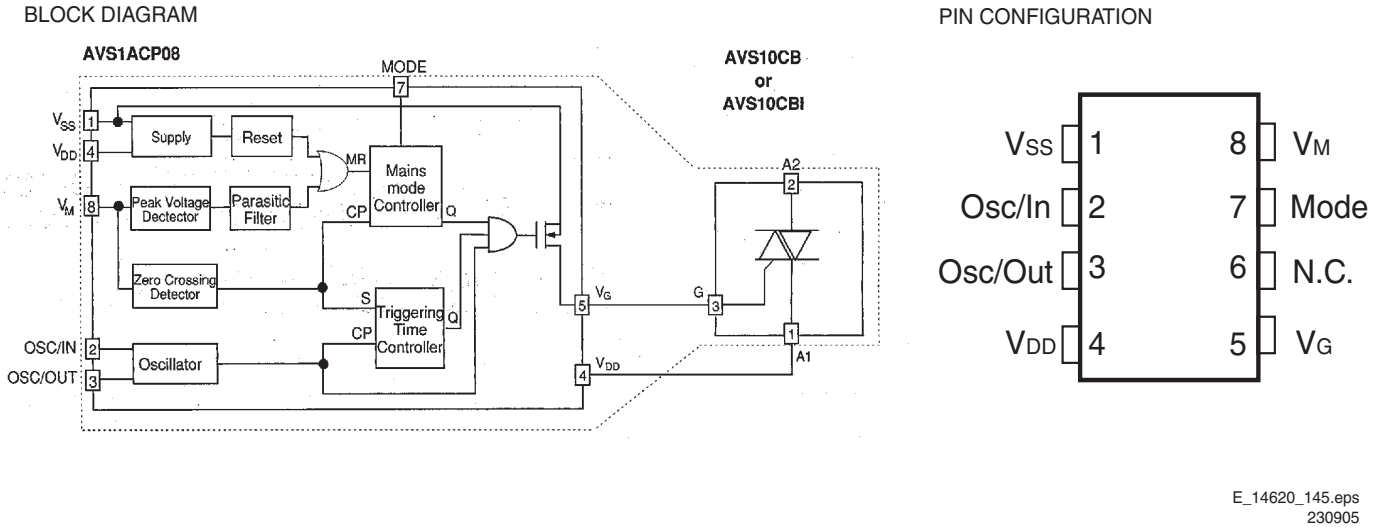
D/K	Monochrome TV system. Sound carrier distance is 6.5 MHz
DFI	Dynamic Frame Insertion
DFU	Directions For Use: owner's manual
DMR	Digital Media Reader: card reader
DNM	Digital Natural Motion
DNR	Digital Noise Reduction: noise reduction feature of the set
DRAM	Dynamic RAM
DRM	Digital Rights Management
DSP	Digital Signal Processing
DST	Dealer Service Tool: special remote control designed for service technicians
DTCP	Digital Transmission Content Protection; A protocol for protecting digital audio/video content that is traversing a high speed serial bus, such as IEEE-1394
DVD	Digital Versatile Disc
DVI(-d)	Digital Visual Interface (d= digital only)
E-DDC	Enhanced Display Data Channel (VESA standard for communication channel and display). Using E-DDC, the video source can read the EDID information form the display.
EDID	Extended Display Identification Data (VESA standard)
EEPROM	Electrically Erasable and Programmable Read Only Memory
EMI	Electro Magnetic Interference
EPLD	Erasable Programmable Logic Device
EU	Europe
EXT	EXTernal (source), entering the set by SCART or by cinches (jacks)
FBL	Fast BLanking: DC signal accompanying RGB signals
FDS	Full Dual Screen (same as FDW)
FDW	Full Dual Window (same as FDS)
FLASH	FLASH memory
FM	Field Memory or Frequency Modulation
FPGA	Field-Programmable Gate Array
FTV	Flat TeleVision
Gb/s	Giga bits per second
G-TXT	Green TeleteXT
H	H_sync to the module
HD	High Definition
HDD	Hard Disk Drive
HDCP	High-bandwidth Digital Content Protection: A “key” encoded into the HDMI/DVI signal that prevents video data piracy. If a source is HDCP coded and connected via HDMI/DVI without the proper HDCP decoding, the picture is put into a “snow vision” mode or changed to a low resolution. For normal content distribution the source and the display device must be enabled for HDCP “software key” decoding.
HDMI	High Definition Multimedia Interface
HP	HeadPhone
I	Monochrome TV system. Sound carrier distance is 6.0 MHz
I^2C	Inter IC bus
I^2D	Inter IC Data bus
I^2S	Inter IC Sound bus
IF	Intermediate Frequency
Interlaced	Scan mode where two fields are used to form one frame. Each field contains half the number of the total amount of lines. The fields are written in “pairs”, causing line flicker.
IR	Infra Red
IRQ	Interrupt Request
ITU-656	The ITU Radio communication Sector (ITU-R) is a standards body subcommittee of the International Telecommunication Union relating to radio communication. ITU-656 (a.k.a. SDI), is a digitized video format used for broadcast grade video. Uncompressed digital component or digital composite signals can be used. The SDI signal is self-synchronizing, uses 8 bit or 10 bit data words, and has a maximum data rate of 270 Mbit/s, with a minimum bandwidth of 135 MHz.
ITV	Institutional TeleVision; TV sets for hotels, hospitals etc.
JOP	Jaguar Output Processor
LS	Last Status; The settings last chosen by the customer and read and stored in RAM or in the NVM. They are called at start-up of the set to configure it according to the customer's preferences
LATAM	Latin America
LCD	Liquid Crystal Display
LED	Light Emitting Diode
L/L'	Monochrome TV system. Sound carrier distance is 6.5 MHz. L' is Band I, L is all bands except for Band I
LORE	LOcal REgression approximation noise reduction
LPL	LG.Philips LCD (supplier)
LS	Loudspeaker
LVDS	Low Voltage Differential Signalling
Mbps	Mega bits per second
M/N	Monochrome TV system. Sound carrier distance is 4.5 MHz
MIPS	Microprocessor without Interlocked Pipeline-Stages; A RISC-based microprocessor
MOP	Matrix Output Processor
MOSFET	Metal Oxide Silicon Field Effect Transistor, switching device
MPEG	Motion Pictures Experts Group
MPIF	Multi Platform InterFace
MUTE	MUTE Line
NC	Not Connected
NICAM	Near Instantaneous Compounded Audio Multiplexing. This is a digital sound system, mainly used in Europe.
NTC	Negative Temperature Coefficient, non-linear resistor
NTSC	National Television Standard Committee. Color system mainly used in North America and Japan. Color carrier NTSC M/N= 3.579545 MHz, NTSC 4.43= 4.433619 MHz (this is a VCR norm, it is not transmitted off-air)
NVM	Non-Volatile Memory: IC containing TV related data such as alignments
O/C	Open Circuit
OSD	On Screen Display
OTC	On screen display Teletext and Control; also called Artistic (SAA5800)
P50	Project 50: communication protocol between TV and peripherals
PAL	Phase Alternating Line. Color system mainly used in West Europe (color carrier= 4.433619 MHz) and South America (color carrier PAL M= 3.575612 MHz and PAL N= 3.582056 MHz)
PCB	Printed Circuit Board (same as “PWB”)
PCM	Pulse Code Modulation

PDP	Plasma Display Panel
PFC	Power Factor Corrector (or Pre-conditioner)
PIP	Picture In Picture
PLL	Phase Locked Loop. Used for e.g. FST tuning systems. The customer can give directly the desired frequency
POR	Power On Reset, signal to reset the uP
Progressive Scan	Scan mode where all scan lines are displayed in one frame at the same time, creating a double vertical resolution.
PTC	Positive Temperature Coefficient, non-linear resistor
PWB	Printed Wiring Board (same as “PCB”)
PWM	Pulse Width Modulation
QRC	Quasi Resonant Converter
QTNR	Quality Temporal Noise Reduction
QVCP	Quality Video Composition Processor
RAM	Random Access Memory
RGB	Red, Green, and Blue. The primary color signals for TV. By mixing levels of R, G, and B, all colors (Y/C) are reproduced.
RC	Remote Control
RC5 / RC6	Signal protocol from the remote control receiver
RESET	RESET signal
ROM	Read Only Memory
R-TXT	Red TeleteXT
SAM	Service Alignment Mode
S/C	Short Circuit
SCART	Syndicat des Constructeurs d'Appareils Radiorecepteurs et Televisieurs
SCL	Serial Clock I^2C
SCL-F	CLock Signal on Fast I^2C bus
SD	Standard Definition
SDA	Serial Data I^2C
SDA-F	DAta Signal on Fast I^2C bus
SDI	Serial Digital Interface, see “ITU-656”
SDRAM	Synchronous DRAM
SECAM	SEequence Couleur Avec Memoire. Color system mainly used in France and East Europe. Color carriers= 4.406250 MHz and 4.250000 MHz
SIF	Sound Intermediate Frequency
SMPS	Switched Mode Power Supply
SoC	System on Chip
SOG	Sync On Green
SOPS	Self Oscillating Power Supply
S/PDIF	Sony Philips Digital InterFace
SRAM	Static RAM
SSB	Small Signal Board
STBY	STand-BY
SVGA	800 × 600 (4:3)
SVHS	Super Video Home System
SW	Software
SWAN	Spatial temporal Weighted Averaging Noise reduction
SXGA	1280 × 1024
TFT	Thin Film Transistor
THD	Total Harmonic Distortion
TMDS	Transmission Minimized Differential Signalling
TS	Transport Stream
TXT	TeleteXT
TXT-DW	Dual Window with TeleteXT
uP	Microprocessor
UXGA	1600 × 1200 (4:3)
V	V-sync to the module
VCP	Video Capture Pipe
VCR	Video Cassette Recorder
VESA	Video Electronics Standards Association
VGA	640 × 480 (4:3)
VL	Variable Level out: processed audio output toward external amplifier
VSB	Vestigial Side Band; modulation method
WYSIWYR	What You See Is What You Record: record selection that follows main picture and sound
WXGA	1280 × 768 (15:9)
XTAL	Quartz crystal
XGA	1024 × 768 (4:3)
Y	Luminance signal
Y/C	Luminance (Y) and Chrominance (C) signal
YPbPr	Component video. Luminance and scaled color difference signals (B-Y and R-Y)
YUV	Component video

9.10 IC Data Sheets

This section shows the internal block diagrams and pin configurations of ICs that are drawn as “black boxes” in the electrical diagrams (with the exception of “memory” and “logic” ICs).

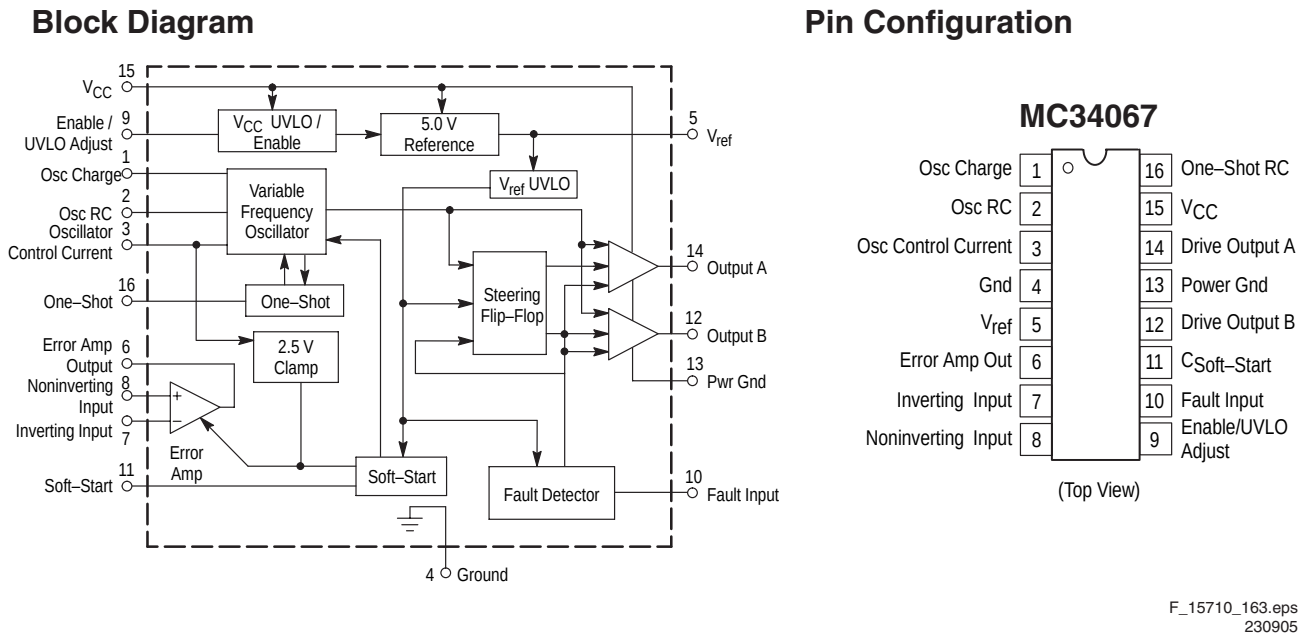
9.10.1 Diagram A1, AVS1ACP08 (IC 7305)



E_14620_145.eps
230905

Figure 9-27 Internal block diagram and pin configuration

9.10.2 Diagram A2, MC34067P (IC 7001)

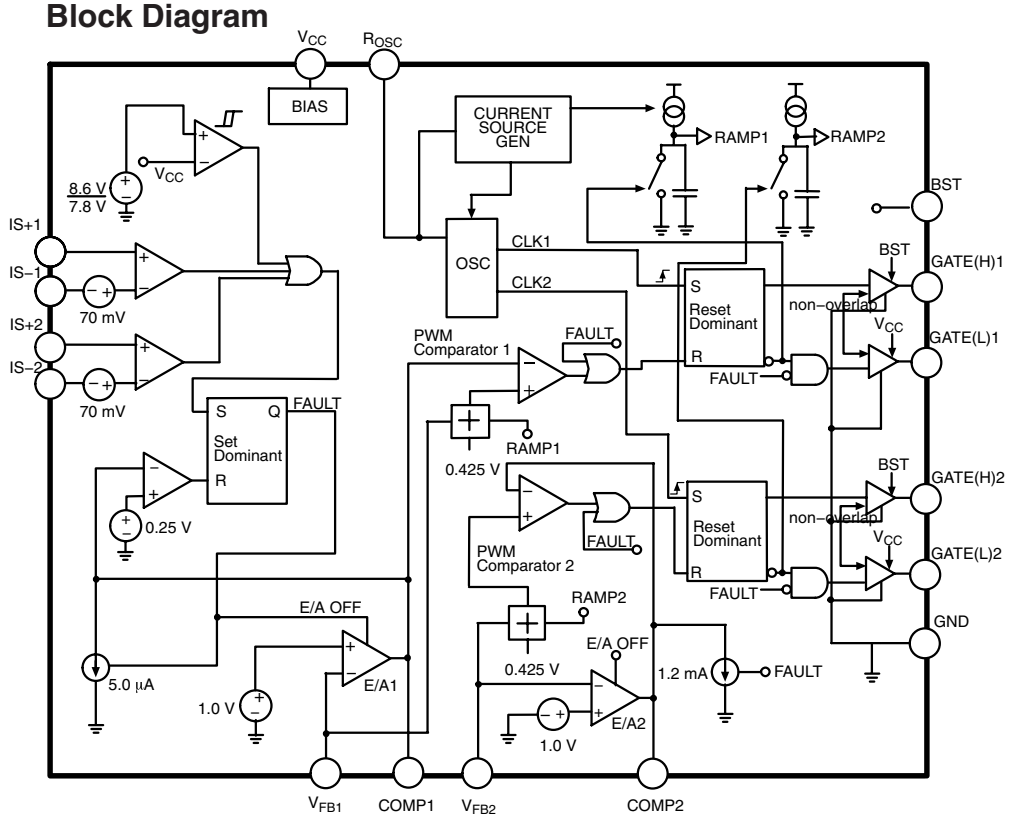


F_15710_163.eps
230905

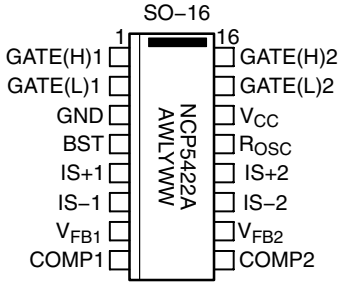
Figure 9-28 Internal block diagram and pin configuration

9.10.3 Diagram B02A, NCP5422AD (IC 7U00)

Block Diagram



Pin Configuration



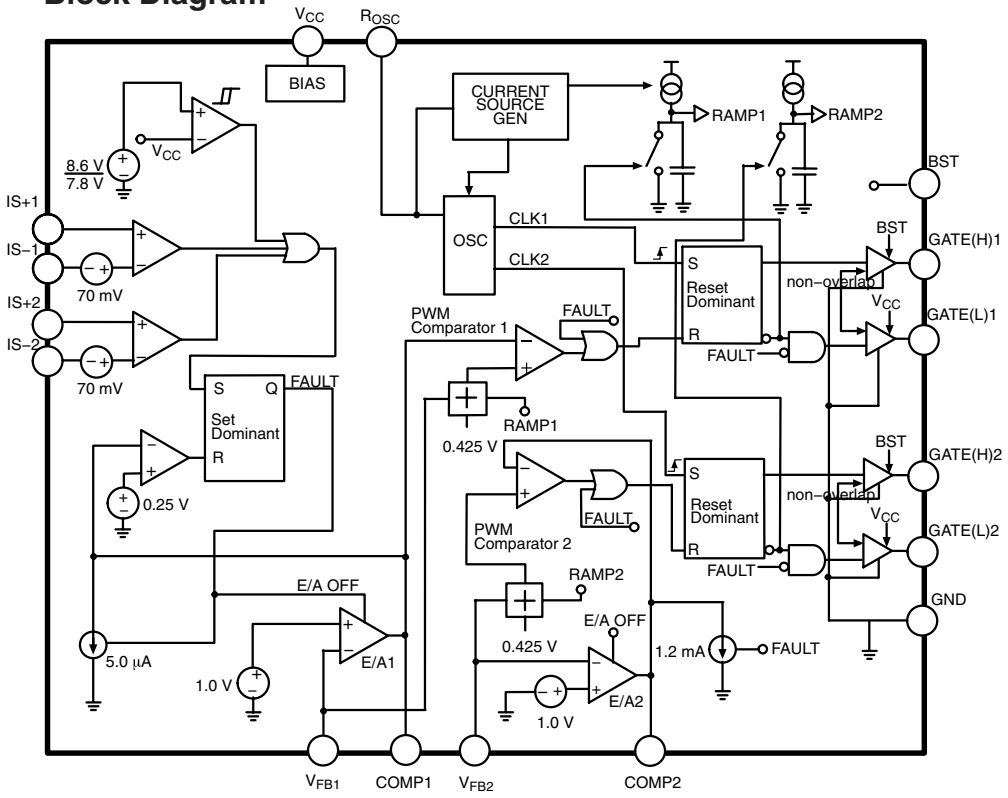
A = Assembly Location
WL = Wafer Lot
Y = Year
WW = Work Week

F_15400_129.eps
240505

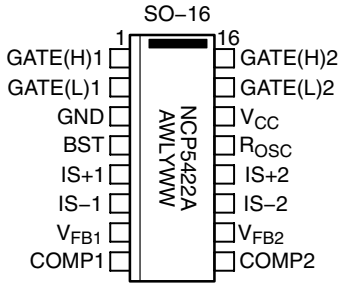
Figure 9-29 Internal block diagram and pin configuration

9.10.4 Diagram B03A, TDA10060 (IC7T18-1)

Block Diagram



Pin Configuration



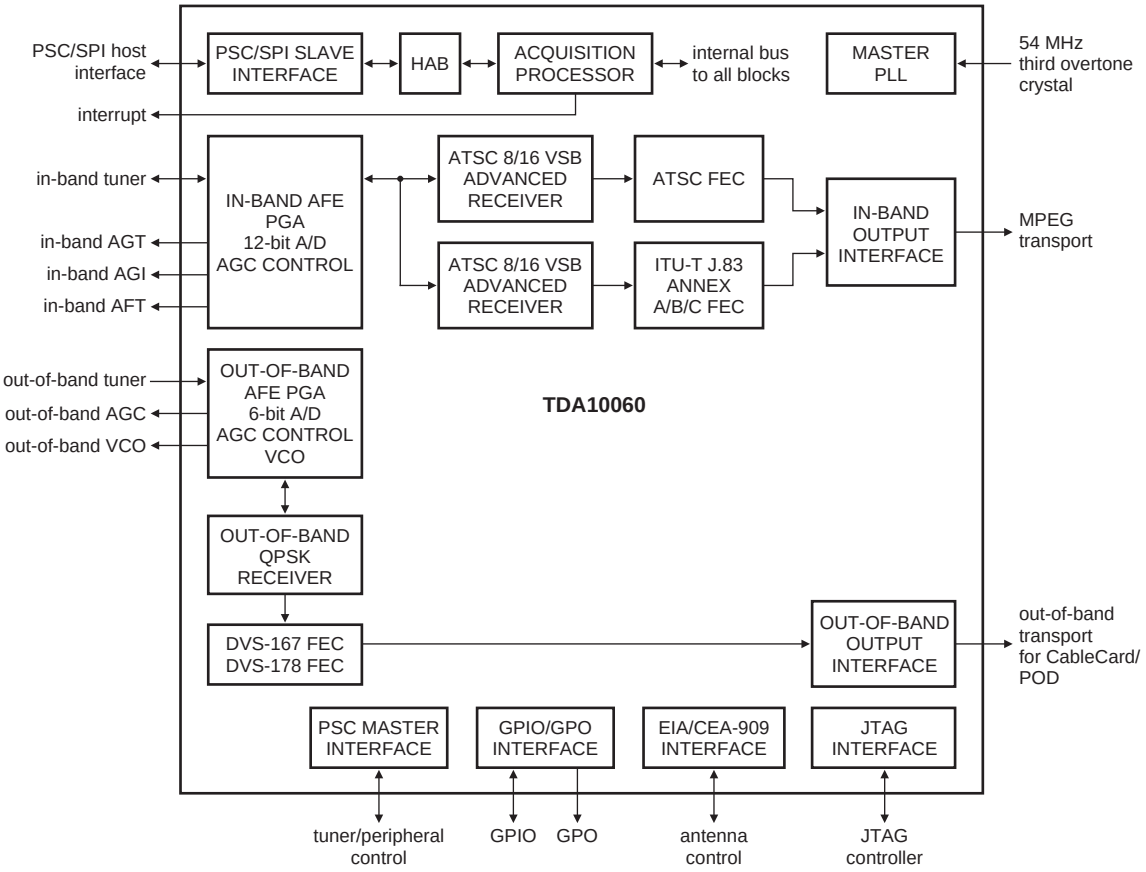
A = Assembly Location
WL = Wafer Lot
Y = Year
WW = Work Week

F_15400_129.eps
240505

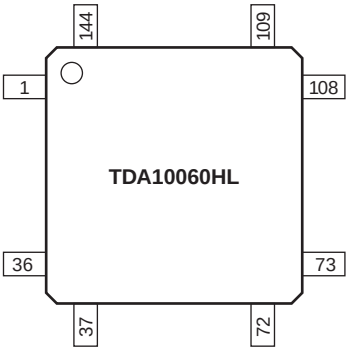
Figure 9-30 Internal block diagram and pin configuration

9.10.5 Diagram B03B, TDA9897HL (IC 7T57)

Block Diagram



Pin Configuration

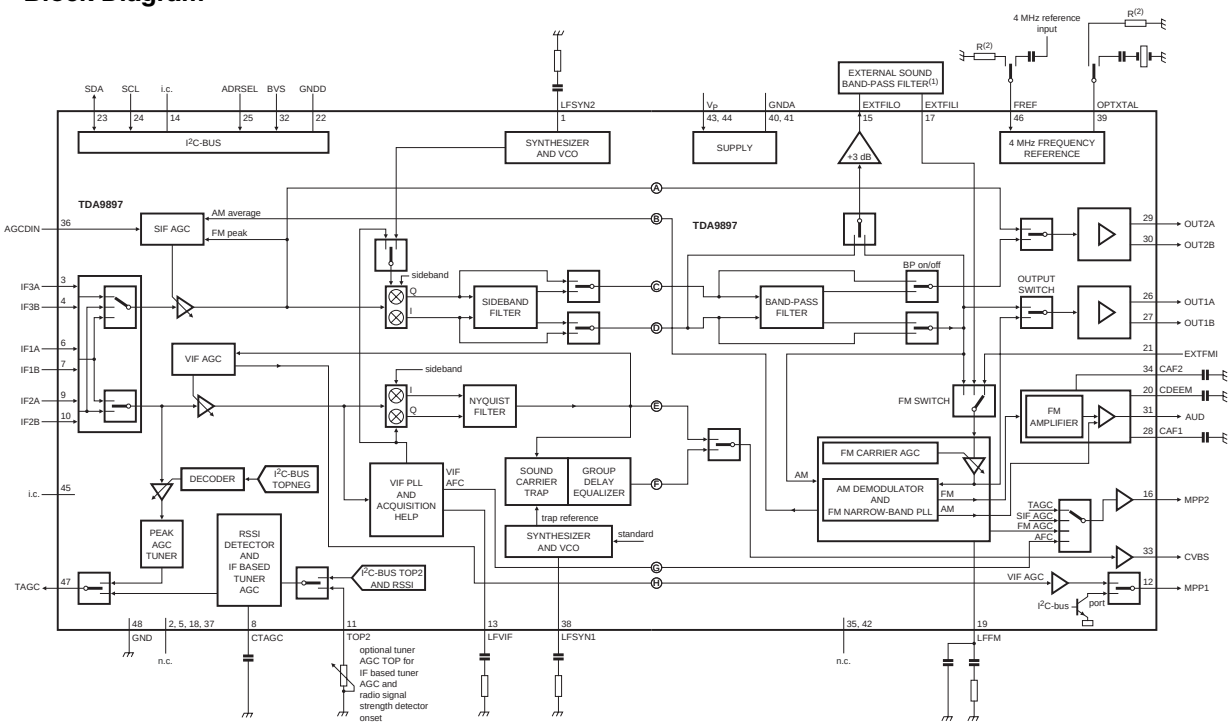


H_16800_028.eps
111007

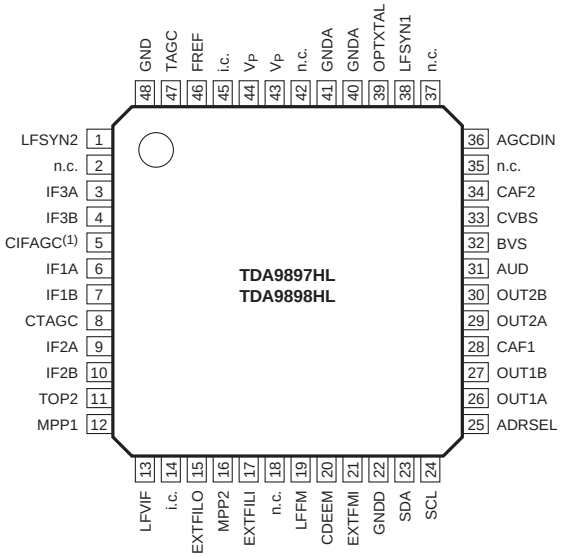
Figure 9-31 Pin configuration

9.10.6 Diagram B05B, EPCS4SI8 (IC 7FA3)

Block Diagram



Pin Configuration

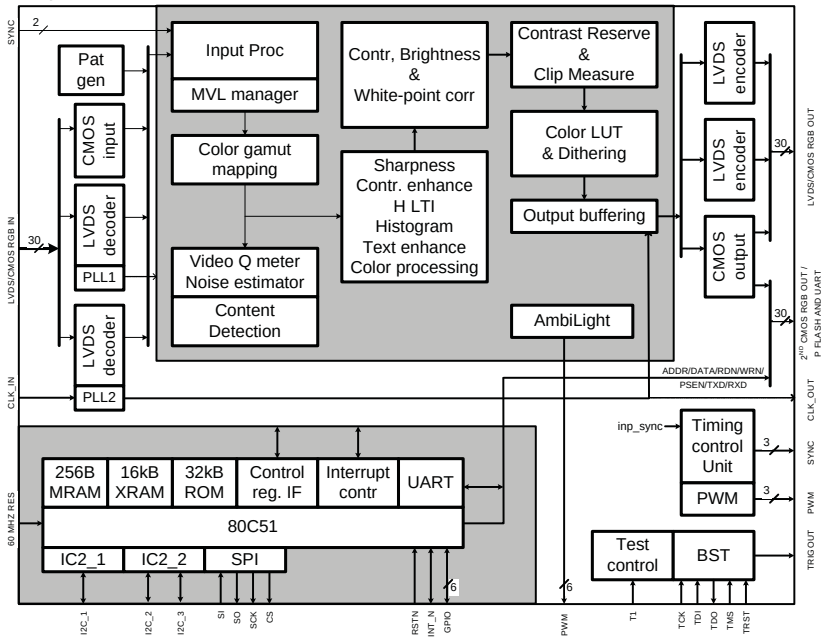


H_16800_029.eps
111007

Figure 9-32 Pin configuration

9.10.7 Diagram B06C, T6TF4HFG (IC 7GE2)

Block Diagram



Pin Configuration

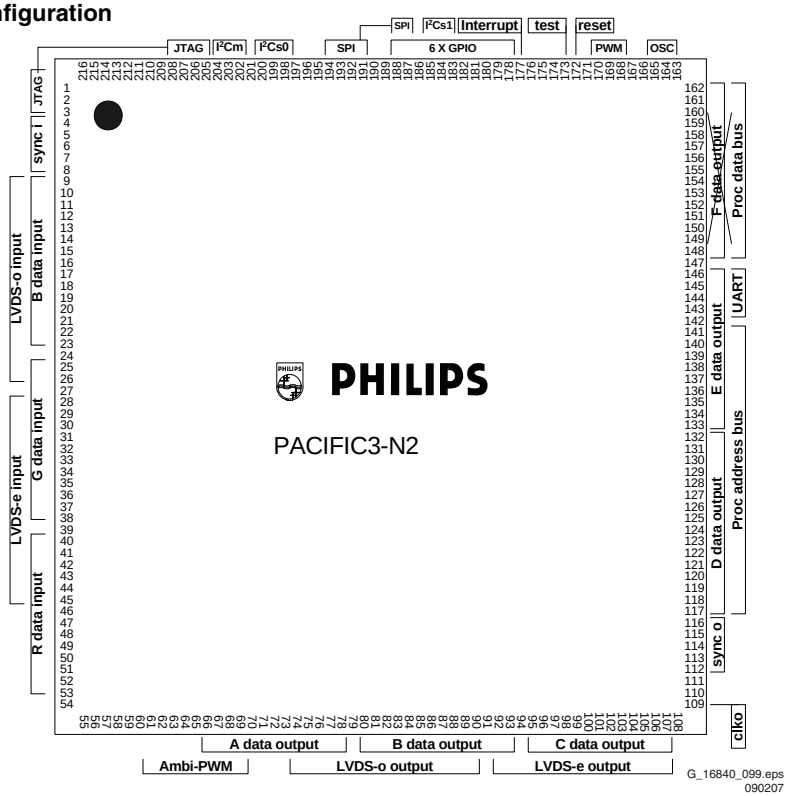
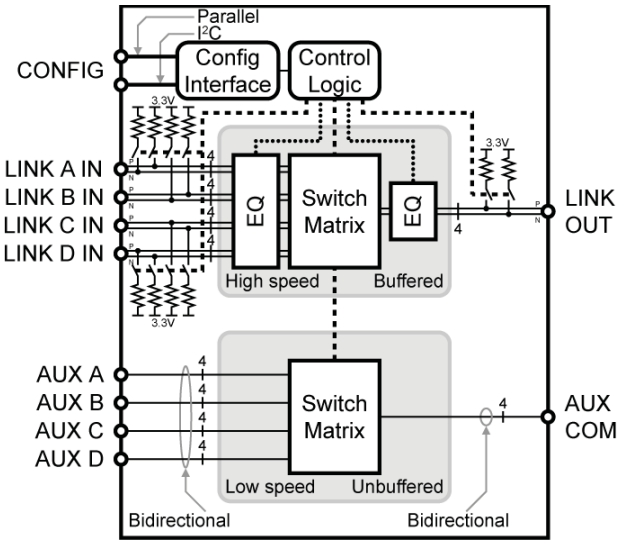


Figure 9-33 Internal block diagram and pin configuration

9.10.8 Diagram B08F, AD8191ASTZ (IC 7J27)

Block Diagram



Pin Configuration

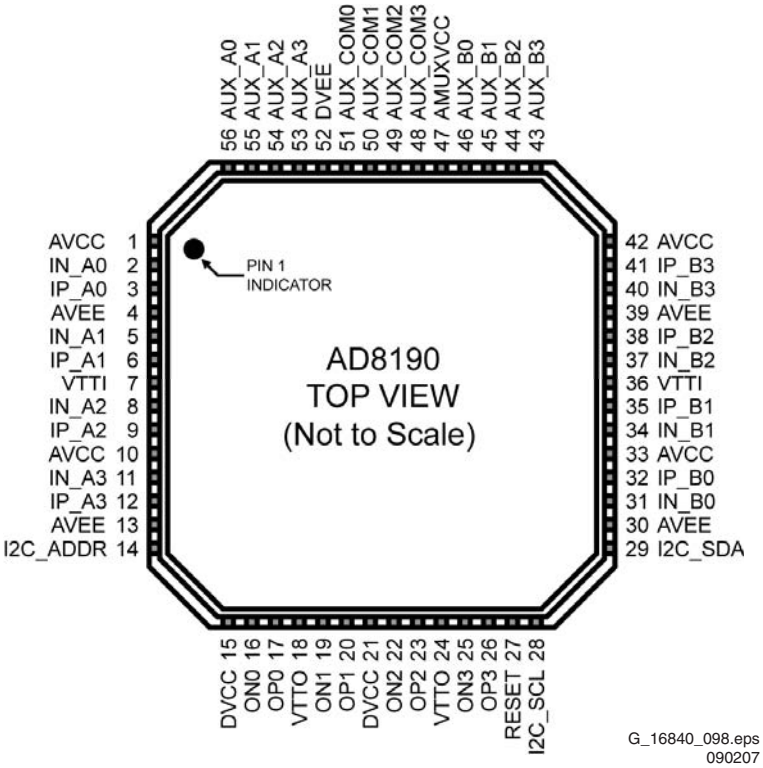
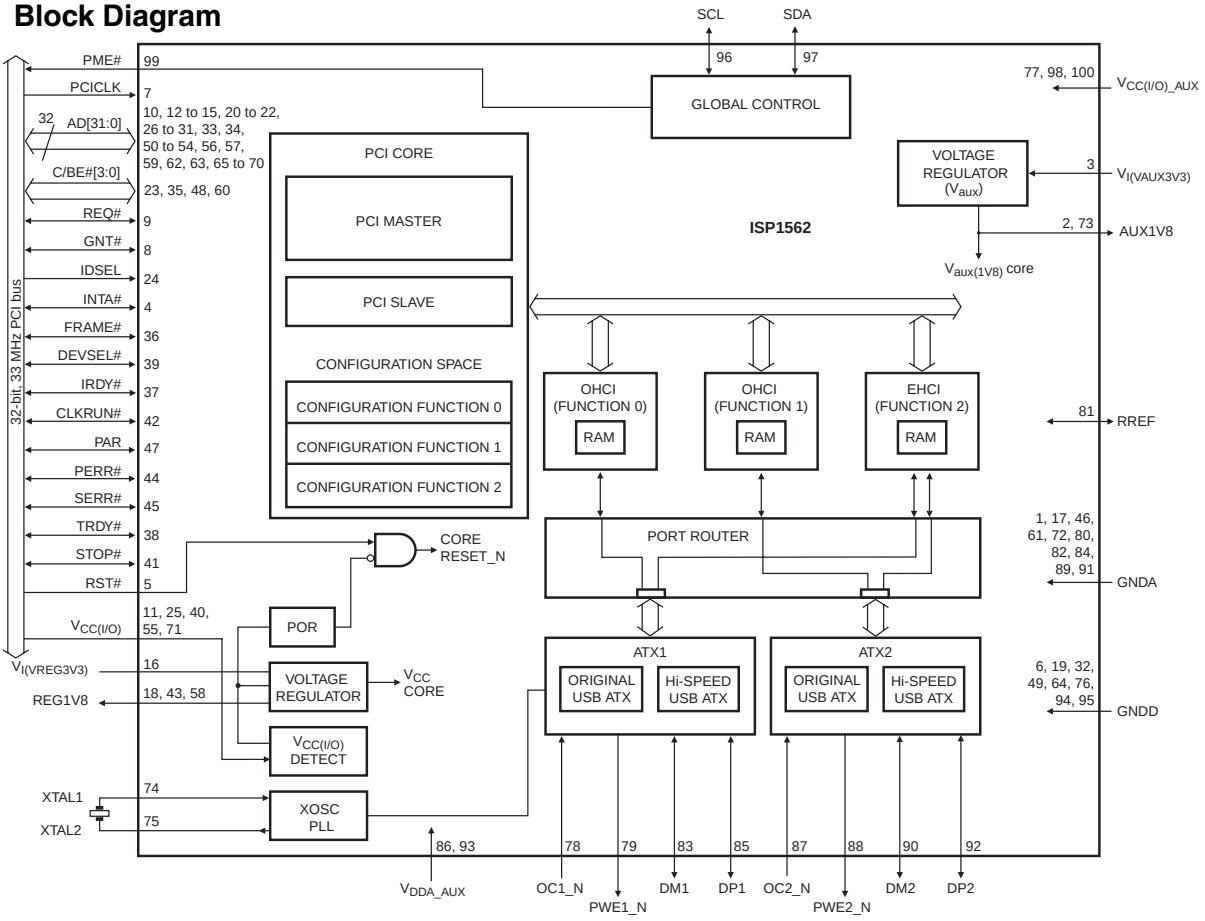


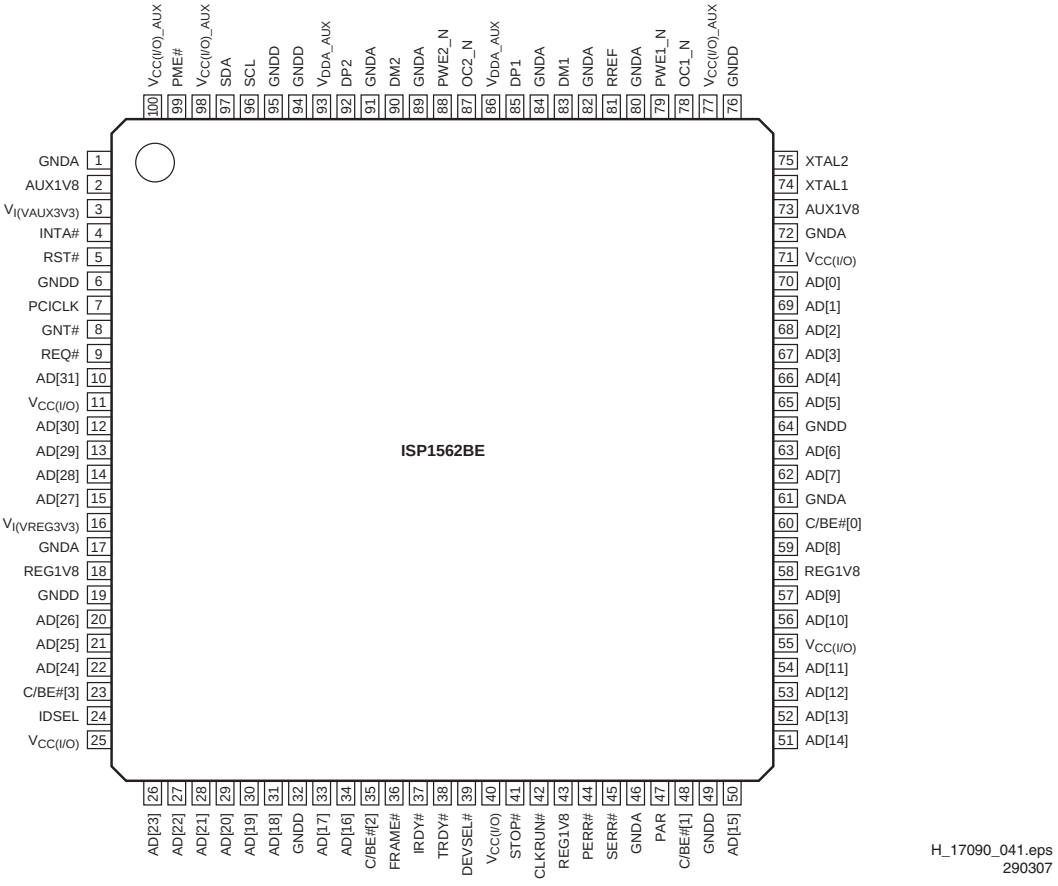
Figure 9-34 Internal block diagram and pin configuration

9.10.9 Diagram B10A, ISP1562BE (IC 7N00)

Block Diagram



Pin Configuration



H_17090_041.eps
290307

Figure 9-35 Internal block diagram and pin configuration

10. Spare Parts List

Sets Listed per Model Number (CTN)

42PFL7422D/37

0802	One Zip-File	Download from web site
1004	9322 252 09682	LC420WU2-SLA2
1010	3139 268 05921	Keyboard Assy [E]
1011	3104 328 52301	Service SSB US [B]
1012	3139 268 09841	IR & LED Assy [J]
1015	3139 268 05091	Side A/V Assy [D]
1050	3104 328 48911	LCD Supply Assy 42 [A]
8101	3104 311 12371	Cable 3p/80/3p Wh
8120	3104 311 12991	Cable 7p/1100/7p Wh
8136	3104 328 52012	Side I/O Assy 47" [D]
8150	3104 311 12061	Cable 41p/280/51p
8316	3104 311 12981	Cable 12p/900/12pWh
8319	3104 311 10011	Cable 14p/480/14pWh
8402	3104 311 02151	Cable 2p3/1000/2p3 Bk
8408	3104 311 08071	Cable 2P3/140
8411	3104 311 05751	Cable 8p/220/8p Wh
8738	3104 311 12801	Cable 4p/820 1k1/2x

5213	3139 128 78511	Loudsp. 8Ω 20W L
5214	3139 128 78251	Loudsp. 8Ω 20W R

42PFL7432D/37

0802	One Zip-File	Download from web site
1010	3139 268 05921	Keyboard Assy [E]
1011	3104 328 52301	Service SSB US [B]
1012	3139 268 09841	IR & LED Assy [J]
1015	3139 268 05091	Side A/V Assy [D]
1050	3104 328 48911	LCD Supply Assy 42 [A]
1070	3104 328 51781	AL Connection Assy [FA]
1175	3139 268 07132	AmbiLight Mod. 6-LED
1176	3139 268 07132	AmbiLight Mod. 6-LED
8101	3104 311 12371	Cable 3p/80/3p Wh
8120	3104 311 12991	Cable 7p/1100/7p Wh
8136	3104 311 12892	Cable 11p/560/11p
8136	3104 328 52012	Side I/O Assy 47" [D]
8150	3104 311 12061	Cable 41p/280/51p
8201	3104 311 12852	Cable 4p/1k1/4p USB
8316	3104 311 12981	Cable 12p/900/12pWh
8319	3104 311 10011	Cable 14p/480/14pWh
8402	3104 311 02151	Cable 2p3/1000/2p3 Bk
8408	3104 311 08071	Cable 2P3/140
8411	3104 311 05751	Cable 8p/220/8p Wh
8509	3104 311 11241	Cable 4p/400/4p Wh
8559	3104 311 12771	Cable 5p/220/5p Bk
8609	3104 311 10301	Cable 4p/1000/4p
8659	3104 311 13121	Cable 5p/1k0/5p Wh
8682	3104 311 03641	Cable 7p/680/7p
8738	3104 311 12801	Cable 4p/820 1k1/2x

5213	3139 128 78511	Loudsp. 8Ω 20W L
5214	3139 128 78251	Loudsp. 8Ω 20W R

47PFL7422D/37

0802	One Zip-File	Download from web site
1004	9322 250 20682	LCD LC470WU4-SLA2
1010	3139 268 05921	Keyboard Assy [E]
1011	3104 328 52301	Service SSB US [B]
1012	3139 268 09841	IR & LED Assy [J]
1015	3139 268 05091	Side A/V Assy [D]
1050	2722 171 00502	LCD Supply 32-37 [A]
8101	3104 311 12371	Cable 3p/80/3p Wh
8120	3104 311 07251	Cable 7p/1200/7p Wh
8136	3104 311 12892	Cable 11p/560/11p
8136	3104 328 52012	Side I/O Assy 47" [D]
8150	3104 311 12261	Cable 41p/380/51p
8201	3104 311 12852	Cable 4p/1k1/4p USB
8316	3104 311 09751	Cable 12p/1000/12p Wh
8319	3104 311 11501	Cable 14p/680/14p
8402	3104 311 13001	Cable 2p3/1k3/2p3 Bk
8408	3104 311 08071	Cable 2P3/140
8411	3104 311 05751	Cable 8p/220/8p Wh
8738	3104 311 12801	Cable 4p/820 1k1/2x

5213	3139 128 78511	Loudsp. 8Ω 20W L
5214	3139 128 78251	Loudsp. 8Ω 20W R

47PFL7432D/37

0802	One Zip-File	Download from web site
1004	9322 250 20682	LCD LC470WU4-SLA2
1010	3139 268 05921	Keyboard Assy [E]
1011	3104 328 52301	Service SSB US [B]
1012	3139 268 09841	IR & LED Assy [J]
1015	3139 268 05091	Side A/V Assy [D]
1050	2722 171 00502	LCD Supply 32-37 [A]
1175	2722 171 00469	AmbiLight Unit 500mm B
8101	3104 311 12371	Cable 3p/80/3p Wh
8120	3104 311 07251	Cable 7p/1200/7p Wh
8136	3104 311 12892	Cable 11p/560/11p
8136	3104 328 52012	Side I/O Assy 47" [D]
8150	3104 311 12261	Cable 41p/380/51p
8201	3104 311 12852	Cable 4p/1k1/4p USB
8316	3104 311 09751	Cable 12p/1000/12p Wh
8319	3104 311 11501	Cable 14p/680/14p
8402	3104 311 13001	Cable 2p3/1k3/2p3 Bk
8408	3104 311 08071	Cable 2P3/140
8411	3104 311 05751	Cable 8p/220/8p Wh
8682	3104 311 12811	Cable 7p/1k4/7p Wh
8738	3104 311 12801	Cable 4p/820 1k1/2x

5213	3139 128 78511	Loudsp. 8Ω 20W L
5214	3139 128 78251	Loudsp. 8Ω 20W R

47PFL9732D/37

0802	One Zip-File	Download from web site
1004	8204 001 51131	LCD LC470WU2-SLA1
1010	3139 268 05921	Keyboard Assy [E]
1011	3104 328 52301	Service SSB US [B]
1012	3139 268 09841	IR & LED Assy [J]
1015	3139 268 05091	Side A/V Assy [D]
1050	2722 171 00518	Display Supply 110/230V
1130	3104 328 52731	JIP DFI Assy [AB]
1175	2722 171 00469	AmbiLight Unit 500mm B
1176	2722 171 00469	AmbiLight Unit 500mm B
8101	3104 311 12371	Cable 3p/80/3p Wh
8120	3104 311 07251	Cable 7p/1200/7p Wh
8136	3104 328 52012	Side I/O Assy 47" [D]
8250	8204 001 51441	Cable 41p/400/41p
8251	8204 001 51451	Cable 41p/250/41p
8252	8204 001 51461	Cable 51p/350/51p
8316	3104 311 09751	Cable 12p/1000/12p Wh
8319	3104 311 11501	Cable 14p/680/14p
8402	3104 311 02151	Cable 2p3/1000/2p3 Bk
8408	3104 311 08071	Cable 2P3/140
8411	3104 311 05751	Cable 8p/220/8p Wh
8590	3104 311 08141	Cable 6p/480/6p
8609	3104 311 10301	Cable 4p/1000/4p
8659	3104 311 07961	Cable 5p/1K2/5p
8682	3104 311 12811	Cable 7p/1k4/7p Wh
8738	3104 311 12801	Cable 4p/820 1k1/2x

5213	3139 128 78511	Loudsp. 8Ω 20W L
5214	3139 128 78251	Loudsp. 8Ω 20W R

52MF437S/37

0802	One Zip-File	Download from web site
1004	9322 254 45682	LCD LK520D3LZ13
1010	3139 268 05921	Keyboard Assy [E]
1011		
1011	3104 328 53762	Service SSB US [B]
1012	3104 328 53611	IR/LED assy [J]
1014	3139 268 04461	Keyboard assy [E]
1015	3139 268 05091	Side A/V Assy [D]
1016	3139 268 05071	Side I/O assy [D]
1050	2722 171 00557	Display Supply 110/230V
8101	3104 311 12371	Cable 3p/80/3p Wh
8120	3104 311 12991	Cable 7p/1100/7p Wh
8136	3104 311 12892	Cable 11p/560/11p
8136	3104 328 52012	Side I/O Assy 47" [D]
8150	3104 311 12061	Cable 41p/280/51p
8201	3104 311 12852	Cable 4p/1k1/4p USB
8316	3104 311 07281	Cable 12p/680/12p
8319	3104 311 10011	Cable 14p/480/14pWh
8402	3104 311 14201	Cable 2p3/1k1/2p3 Bk
8408	3104 311 08071	Cable 2P3/140
8411	3104 311 05751	Cable 8p/220/8p Wh
8738	3104 311 13021	Cable 4p/1k0 1k3/2x2

5213	3139 128 78511	Loudsp. 8Ω 20W L
5214	3139 128 78251	Loudsp. 8Ω 20W R

52PFL7422D/37

0802	One Zip-File	Download from web site
1004	9322 254 45682	LCD LK520D3LZ13
1010	3139 268 05921	Keyboard Assy [E]
1011		
1011	3104 328 53762	Service SSB US [B]
1012	3104 328 53611	IR/LED assy [J]
1014	3139 268 04461	Keyboard assy [E]
1015	3139 268 05091	Side A/V Assy [D]
1016	3139 268 05071	Side I/O assy [D]
1050	2722 171 00557	Display Supply 110/230V
8101	3104 311 12371	Cable 3p/80/3p Wh
8120	3104 311 12991	Cable 7p/1100/7p Wh
8136	3104 311 12892	Cable 11p/560/11p
8136	3104 328 52012	Side I/O Assy 47" [D]
8150	3104 311 12061	Cable 41p/280/51p
8201	3104 311 12852	Cable 4p/1k1/4p USB
8316	3104 311 07281	Cable 12p/680/12p
8319	3104 311 10011	Cable 14p/480/14pWh
8402	3104 311 14201	Cable 2p3/1k1/2p3 Bk
8408	3104 311 08071	Cable 2P3/140
8411	3104 311 05751	Cable 8p/220/8p Wh
8738	3104 311 13021	Cable 4p/1k0 1k3/2x2

5213	3139 128 78511	Loudsp. 8Ω 20W L
5214	3139 128 78251	Loudsp. 8Ω 20W R

52PFL7432D/37

0802	One Zip-File	Download from web site
1004	9322 254 45682	LCD LK520D3LZ13
1010	3139 268 05921	Keyboard Assy [E]
1011		
1011	3104 328 53762	Service SSB US [B]
1012	3104 328 53611	IR/LED assy [J]
1014	3139 268 04461	Keyboard assy [E]
1015	3139 268 05091	Side A/V Assy [D]
1016	3139 268 05071	Side I/O assy [D]
1050	2722 171 00557	Display Supply 110/230V
8101	3104 311 12371	Cable 3p/80/3p Wh
8120	3104 311 12991	Cable 7p/1100/7p Wh
8136	3104 311 12892	Cable 11p/560/11p
8136	3104 328 52012	Side I/O Assy 47" [D]
8150	3104 311 12061	Cable 41p/280/51p
8201	3104 311 12852	Cable 4p/1k1/4p USB
8316	3104 311 07281	Cable 12p/680/12p
8319	3104 311 10011	Cable 14p/480/14pWh
8402	3104 311 14201	Cable 2p3/1k1/2p3 Bk
8408	3104 311 08071	Cable 2P3/140
8411	3104 311 05751	Cable 8p/220/8p Wh
8738	3104 311 13021	Cable 4p/1k0 1k3/2x2

5213	3139 128 78511	Loudsp. 8Ω 20W L
5214	3139 128 78251	Loudsp. 8Ω 20W R

Display Supply 42" [A]

Various

1301	2422 026 05133	Connector SVHS 4p f
1302	2422 026 05807	Soc. Cinch 3p f YeWhRd
1302	4822 252 60151	Surge protect
1303	4822 252 60151	Surge protect
1303	4822 267 31014	Socket Headphone
1304	2422 025 10655	Connector 11p m
1308	2422 033 00486	Socket USB 4p F
1308	4822 265 20723	Connector 2p
1309	2422 025 09406	Connector 4p m
1310	2422 025 10768	Connector 3p m
1314	4822 265 11253	Fuse holder
1317	2422 025 10772	Connector 12p m

1319	2422 025 10773	Connector 14p m
1350	2422 132 07411	Relay 1p 5V 5A
1M09	2422 025 09406	Connector 4p m
1M12	2422 025 09406	Connector 4p m
1M90	2422 025 08149	Connector 6p m
1P02	2422 025 16374	Connector 2p m
1P11	4822 265 11352	Connector 8p
1P15	2422 025 10768	Connector 3p m
1P22	4822 265 20723	Connector 2p

⊣⊢

2002	2020 012 00006	680µF 20% 25V
2003	4822 124 80061	1000µF 20% 25V
2006	3198 016 31020	1nF 25V 0603
2007	4822 126 14583	470nF 10% 16V 0805
2008	4822 126 14583	470nF 10% 16V 0805
2009	5322 126 11578	1nF 10% 50V 0603
2010	4822 124 40207	100µF 20% 25V
2012	4822 126 13862	1.5nF 10% 2kV
2013	4822 126 13862	1.5nF 10% 2kV
2014	4822 126 14237	470pF 10% 2kV
2015	5322 126 11583	10nF 10% 50V 0603
2016	2238 586 59812	100nF 20% 50V 0603
2018	5322 126 11578	1nF 10% 50V 0603
2019	5322 126 11583	10nF 10% 50V 0603
2020	2020 021 00039	1800µF 20% 35V
2022	2020 021 00039	1800µF 20% 35V
2023	4822 126 14583	470nF 10% 16V 0805
2024	2238 586 59812	100nF 20% 50V 0603
2025	2222 780 15663	1µF 10% 0805
2026	4822 126 14238	2.2nF 50V 0603
2028	5322 126 11578	1nF 10% 50V 0603
2029	5322 126 11578	1nF 10% 50V 0603
2033	2222 780 15663	1µF 10% 0805
2034	5322 126 11578	1nF 10% 50V 0603
2035	5322 126 11578	1nF 10% 50V 0603
2036	5322 126 11578	1nF 10% 50V 0603
2037	3198 017 34730	47nF 16V 0603
2038	2020 021 00039	1800µF 20% 35V
2039	5322 126 11578	1nF 10% 50V 0603
2040	4822 126 14249	560pF 10% 50V 0603
2041	2020 021 00039	1800µF 20% 35V
2042	5322 126 11578	1nF 10% 50V 0603
2043	2020 021 00039	1800µF 20% 35V
2044	5322 126 11578	1nF 10% 50V 0603
2045	5322 126 11578	1nF 10% 50V 0603
2046	3198 017 34730	47nF 16V 0603
2049	5322 126 11578	1nF 10% 50V 0603
2050	5322 126 11578	1nF 10% 50V 0603
2052	4822 126 14238	2.2nF 50V 0603
2053	4822 126 13881	470pF 5% 50V
2054	4822 126 13881	470pF 5% 50V
2055	4822 126 14238	2.2nF 50V 0603
2056	4822 126 14238	2.2nF 50V 0603
2057	4822 126 14238	2.2nF 50V 0603
2058	2238 867 18101	100pF 1% 50V 0603
2061	2238 867 18101	100pF 1% 50V 0603
2062	2238 867 18101	100pF 1% 50V 0603
2063	2238 916 15641	22nF 10% 25V 0603
2066	2020 021 00039	1800µF 20% 35V
2069	4822 126 14585	100nF 10% 0805 50V
2075	4822 124 40248	10µF 20% 63V
2076	3198 017 33330	33nF 20% 16V 0603
2081	2238 586 59812	100nF 20% 50V 0603
2300	2222 338 22474	470nF 20% 275V
2301	2222 338 22474	470nF 20% 275V
2301	4822 126 11785	47pF 5% 50V 0603
2302	4822 126 11785	47pF 5% 50V 0603
2303	4822 122 33761	22pF 5% 50V
2304	4822 126 11785	47pF 5% 50V 0603
2305	2020 552 94427	100pF 5% 50V
2306	2020 552 94427	100pF 5% 50V
2307	2238 916 15641	22nF 10% 25V 0603
2308	2238 916 15641	22nF 10% 25V 0603
2309	5322 126 11583	10nF 10% 50V 0603
2310	5322 126 11583	10nF 10% 50V 0603
2311	4822 122 33761	22pF 5% 50V
2312	2020 004 90297	100µF 20% 16V
2315	2020 024 90748	820µF 20% 250V
2316	2020 024 90748	820µF 20% 250V
2320	2020 024 90748	820µF 20% 250V
2321	2020 024 90748	820µF 20% 250V
2327	2222 339 22474	470µF 20% 275V
2332	4822 126 14238	2.2nF 50V 0603
2333	4822 126 14238	2.2nF 50V 0603
2401	2020 021 00039	1800µF 20% 35V
2402	2020 021 00039	1800µF 20% 35V
2403	4822 126 14585	100nF 10% 0805 50V
2404	2238 586 59812	100nF 20% 50V 0603
2405	4822 126 13883	220pF 5% 50V
2407	5322 126 11583	10nF 10% 50V 0603
2408	3198 027 34780	4.7µF 25V 0805
2410	3198 017 36830	68nF 10% 16V 0603
2411	4822 126 13881	470pF 5% 50V

⊣WW⊢

3000	4822 052 10478	4.7Ω 5% 0.33W
3001	4822 051 30101	100Ω 5% 0.062W
3002	5322 117 13033	15kΩ 1% 0.063W 0603
3003	4822 051 30562	5.6kΩ 5% 0.063W 0603
3004	4822 051 30273	27kΩ 5% 0.062W
3005	4822 051 30333	33kΩ 5% 0.062W
3006	4822 051 30103	10kΩ 5% 0.062W
3007	4822 051 30103	10kΩ 5% 0.062W
3008	4822 051 30331	330Ω 5% 0.062W
3009	4822 051 30332	3.3Ω 5% 0.062W
3010	4822 051 30471	47Ω 5% 0.062W
3011	4822 051 30471	47Ω 5% 0.062W
3012	4822 051 30103	10kΩ 5% 0.062W
3013	4822 051 30103	10kΩ 5% 0.062W
3014	4822 052 10101	100Ω 5% 0.33W
3015	4822 052 10479	47Ω 5% 0.33W
3016	4822 051 30332	3.3Ω 5% 0.062W
3017	4822 052 10101	100Ω 5% 0.33W
3018	4822 052 10479	47Ω 5% 0.33W
3019	4822 051 30332	3.3Ω 5% 0.062W
3020	4822 051 30332	3.3Ω 5% 0.062W
3021	4822 117 11373	100Ω 1% 0805
3022	4822 051 30681	680Ω 5% 0.062W
3023	4822 051 30103	10kΩ 5% 0.062W
3024	4822 050 21803	18kΩ 1% 0,6W
3025	3198 021 31820	1.8kΩ 5% 0.062W 0603
3026	2120 368 90118	Potm. lin. 470Ω hor.
3027	4822 117 13632	100kΩ 1% 0603 0.62W
3028	4822 051 30102	1kΩ 5% 0.062W
3029	4822 051 30332	3.3Ω 5% 0.062W
3030	4822 051 30183	18kΩ 5% 0.062W
3034	4822 051 30102	1kΩ 5% 0.062W
3035	4822 051 30101	100Ω 5% 0.062W
3036	4822 051 30103	10kΩ 5% 0.062W
3038	4822 050 24702	4.7kΩ 1% 0.6W
3039	4822 051 30102	1kΩ 5% 0.062W
3040	3198 021 38220	8.2kΩ 5% 0.062W 0603
3041	4822 051 30333	33kΩ 5% 0.062W
3042	4822 051 30222	2.2kΩ 5% 0.062W
3043	4822 051 30109	10Ω 5% 0.062W
3044	4822 051 30103	10kΩ 5% 0.062W
3045	4822 117 11373	100Ω 1% 0805
3046	4822 117 11373	100Ω 1% 0805
3047	4822 051 30479	47Ω 5% 0.062W
3048	4822 051 30272	2.7kΩ 5% 0.062W
3049	4822 117 13632	100kΩ 1% 0603 0.62W
3050	4822 053 20155	1.5MΩ 5% 0.25W
3051	4822 051 30103	10kΩ 5% 0.062W
3054	4822 051 30474	470kΩ 5% 0.062W
3056	4822 051 30221	220Ω 5% 0.062W
3057	4822 051 30221	220Ω 5% 0.062W
3058	4822 053 20565	5.6MΩ 5% 0.25W
3059	5322 117 13019	100kΩ 1% 0.063W 0603
3061	4822 051 30332	3.3Ω 5% 0.062W
3062	4822 051 30332	3.3Ω 5% 0.062W
3065	4822 051 30102	1kΩ 5% 0.062W
3068	4822 051 30221	220Ω 5% 0.062W
3069	4822 051 30152	1.5Ω 5% 0.062W
3071	4822 051 30101	100Ω 5% 0.062W
3072	4822 051 30101	100Ω 5% 0.062W
3075	2422 086 00807	Fuse T 3A 32V
3076	2422 086 00807	Fuse T 3A 32V
3080	4822 050 25602	5K60 1% 0.6W
3081	4822 050 25602	5K60 1% 0.6W
3082	4822 050 25602	5K60 1% 0.6W
3083	4822 050 25602	5K60 1% 0.6W
3084	4822 050 25602	5K60 1% 0.6W
3087	4822 050 25602	5K60 1% 0.6W
3088	4822 050 25602	5K60 1% 0.6W
3089	4822 051 30103	10kΩ 5% 0.062W
3092	4822 051 30102	1kΩ 5% 0.062W
3093	4822 051 30222	2.2kΩ 5% 0.062W
3094	4822 051 30222	2.2kΩ 5% 0.062W
3095	4822 051 30472	4.7Ω 5% 0.062W
3096	4822 051 30102	1kΩ 5% 0.062W
3097	4822 051 30152	1.5Ω 5% 0.062W
3098	4822 051 30563	56kΩ 5% 0.062W
3300	2122 550 00158	VDR 1mA 612V
3301	4822 051 30759	75Ω 5% 0.062W
3301	4822 053 21475	4.7MΩ 5% 0.5W
3302	4822 051 30759	75Ω 5% 0.062W
3302	4822 053 21475	4.7MΩ 5% 0.5W
3303	4822 051 30109	10Ω 5% 0.062W
3303	4822 053 21475	4.7MΩ 5% 0.5W
3304	4822 051 30101	100Ω 5% 0.062W
3304	4822 116 83872	220Ω 5% 0.5W
3305	4822 051 30109	10Ω 5% 0.062W
3305	4822 116 83872	220Ω 5% 0.5W
3306	4822 051 30101	100Ω 5% 0.062W
3307	4822 051 30101	100Ω 5% 0.062W
3308	4822 051 30101	100Ω 5% 0.062W
3309	4822 117 13632	100kΩ 1% 0603 0.62W
3310	4822 051 30101	100Ω 5% 0.062W
3311	4822 117 13632	100kΩ 1% 0603 0.62W
3312	4822 051 30103	10kΩ 5% 0.062W
3313	4822 051 30103	10kΩ 5% 0.062W
3318	4822 053 10471	470Ω 5% 1W
3325	4822 051 30103	10kΩ 5% 0.062W
3326	4822 051 30153	15kΩ 5% 0.062W
3327	4822 051 30682	6.8Ω 5% 0.062W
3328	4822 051 30221	220Ω 5% 0.062W
3329	4822 051 30392	3.9Ω 5% 0.063W 0603
3401	4822 051 30103	10kΩ 5% 0.062W
3403	3198 021 38230	82kΩ 5% 0.062W 0603
3404	4822 051 30102	1kΩ 5% 0.062W
3405	4822 051 30103	10kΩ 5% 0.062W
3407	2322 762 60107	0.1Ω 5% 2512
3408	2322 762 60107	0.1Ω 5% 2512
3409	4822 051 30103	10kΩ 5% 0.062W
3410	4822 051 30102	1kΩ 5% 0.062W
3411	4822 051 30102	1kΩ 5% 0.062W
3412	4822 051 30471	47Ω 5% 0.062W
3413	4822 051 30103	10kΩ 5% 0.062W
3416	4822 051 30101	100Ω 5% 0.062W
3417	4822 051 30101	100Ω 5% 0.062W
3418	4822 051 30479	47Ω 5% 0.062W
3419	2322 762 60107	0.1Ω 5% 2512
3420	4822 052 10479	47Ω 5% 0.33W
3425	4822 051 30471	47Ω 5% 0.062W
3426	4822 051 30153	15kΩ 5% 0.062W
3427	4822 051 30153	15kΩ 5% 0.062W
3430	4822 051 30221	220Ω 5% 0.062W
3999	4822 051 30102	1kΩ 5% 0.062W
4301	4822 051 30008	Jumper 0603
4302	4822 051 30008	Jumper 0603
4308	4822 051 30008	Jumper 0603
4309	4822 051 30008	Jumper 0603
4310	4822 051 30008	Jumper 0603
4311	4822 051 30008	Jumper 0603
9002	4822 051 30008	Jumper 0603
9017	4822 051 30008	Jumper 0603
9021	4822 051 30008	Jumper 0603
9028	4822 051 30008	Jumper 0603
9032	4822 051 30008	Jumper 0603
9404	4822 051 30008	Jumper 0603
9407	4822 117 13632	100kΩ 1% 0603 0.62W
9408	4822 050 21502	1K50 1% 0,6W
9534	4822 051 20008	Jumper 0805
9538	4822 051 30008	Jumper 0603
9541	4822 051 30008	Jumper 0603
9555	4822 130 30621	1N4148

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5001	2422 531 02444	S13932-04Y
5002	2422 531 00164	2652.0026D Y
5005	4822 526 10704	Bead 50 Ω at 100MHz
5007	4822 526 10704	Bead 50 Ω at 100MHz
5009	4822 157 11411	Bead 80Ω at 100MHz
5010	4822 157 11411	Bead 80Ω at 100MHz
5011	2422 531 00164	2652.0026D Y
5012	4822 526 10704	Bead 50 Ω at 100MHz
5013	4822 526 10704	Bead 50 Ω at 100MHz
5015	4822 157 11411	Bead 80Ω at 100MHz
5016	4822 157 11411	Bead 80Ω at 100MHz
5017	4822 526 10704	Bead 50 Ω at 100MHz
5021	4822 157 11411	Bead 80Ω at 100MHz
5022	4822 157 11411	Bead 80Ω at 100MHz
5025	4822 157 11411	Bead 80Ω at 100MHz
5026	4822 157 11411	Bead 80Ω at 100MHz
5028	2422 536 01194	3.3µH 20%
5029	2422 536 01194	3.3µH 20%
5030	4822 157 11411	Bead 80Ω at 100MHz
5300	2422 549 44197	Bead 220Ω at 100MHz
5305	2422 549 43563	Filt. 23MHz 3A DMF3520
5306	2422 549 43563	Filt. 23MHz 3A DMF3520
5308	4822 526 10704	Bead 50 Ω at 100MHz
5401	2422 536 01605	40µH BC15605-00

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6002	4822 130 11397	BAS316
6003	4822 130 11397	BAS316
6004	4822 130 80622	BAT54
6005	4822 130 80622	BAT54
6007	4822 130 11397	BAS316
6008	4822 130 11397	BAS316
6010	4822 130 11397	BAS316
6011	4822 130 11397	BAS316
6012	9322 208 80685	BZG05C15

6013	9322 208 80685	BZG05C15
6014	9340 548 71115	PDZ33B
6015	4822 130 11397	BAS316
6018	4822 130 11152	UDZ18B
6021	4822 130 11572	STPS8H100F
6022	4822 130 11148	UDZ4.7B
6023	4822 130 11397	BAS316
6024	9322 202 55685	BYG22D
6025	9322 202 55685	BYG22D
6026	4822 130 80622	BAT54
6027	4822 130 11397	BAS316
6028	4822 130 11397	BAS316
6031	4822 130 11572	STPS8H100F
6032	9322 202 55685	BYG22D
6033	9322 202 55685	BYG22D
6038	4822 130 11397	BAS316
6040	4822 130 11572	STPS8H100F
6041	4822 130 11572	STPS8H100F
6042	9340 548 47115	PDZ3.3B
6043	4822 130 11551	UDZS10B
6045	9322 202 55685	BYG22D
6069	4822 130 10838	UDZ3.3B
6074	4822 130 11572	STPS8H100F
6075	4822 130 11572	STPS8H100F
6076	4822 130 10838	UDZ3.3B
6301	9322 146 61685	DF3A6.8FU
6302	9322 146 61685	DF3A6.8FU
6303	9322 146 61685	DF3A6.8FU
6304	4822 130 11397	BAS316
6304	9322 146 61685	DF3A6.8FU
6305	4822 130 11397	BAS316
6305	9322 146 61685	DF3A6.8FU
6306	9322 146 61685	DF3A6.8FU
6307	9322 146 61685	DF3A6.8FU
6307	9322 237 00682	Bridge TS6B05G-06
6360	4822 130 11397	BAS316
6361	4822 130 11397	BAS316
6401	9322 161 46687	STPS745FP
6402	4822 130 11152	UDZ18B
6403	4822 130 11397	BAS316
6406	4822 130 11397	BAS316
6407	4822 130 11397	BAS316
6409	4822 130 11397	BAS316



7001	9322 108 21682	MC34067P
7002	9322 149 04682	TCET1102
7004	3198 010 42310	BC847BW
7005	9322 205 26687	FQPF18N50V2
7006	9322 205 26687	FQPF18N50V2
7007	3198 010 42320	BC857BW
7008	3198 010 42320	BC857BW
7009	3198 010 42320	BC857BW
7010	9322 192 16685	TS2431AI
7011	3198 010 42320	BC857BW
7012	3198 010 42310	BC847BW
7013	3198 010 42310	BC847BW
7014	3198 010 42320	BC857BW
7015	3198 010 42320	BC857BW
7016	3198 010 42320	BC857BW
7308	3198 010 42310	BC847BW
7309	9340 219 30115	BC817-25W
7401	5322 209 90529	MC34063AD
7402	9322 183 30687	STP55NF06FP
7403	3198 010 44350	BC807-25W
7404	3198 010 42310	BC847BW
7405	9340 219 30115	BC817-25W
7407	3198 010 42320	BC857BW

DFI Panel [AB]

Various

1F00	2422 025 17274	Connector 10p m
1F04	2422 025 18779	Connector 4p m
1F50	2422 025 18973	Conn. 41p f 0.5 smd
1F51	2422 025 20117	Conn. 51p f 0.5 smd
1F52	2422 025 18973	Conn. 41p f 0.5 smd
1M90	2422 025 18741	Connector 6p m
1U01	2422 086 00791	Fuse 3A T 125V
1U02	2422 086 00791	Fuse 3A T 125V

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2CBC	2020 552 96628	10nF 10% 16V 0402
2CBD	2020 552 96637	10µF 10% 6.3V 0805
2CBH	2020 552 96628	10nF 10% 16V 0402
2CBK	2020 552 96637	10µF 10% 6.3V 0805
2F2A	2238 586 59812	100nF 20% 50V 0603
2F2B	2022 552 05679	1µF 10% 16V 0805
2F2E	2238 869 15101	100pF 5% 50V 0402
2F2F	2238 869 15101	100pF 5% 50V 0402
2F2G	2238 869 15101	100pF 5% 50V 0402
2F2H	2238 869 15101	100pF 5% 50V 0402
2F2I	2238 586 59812	100nF 20% 50V 0603
2F2K	2238 869 15109	10pF 5% 50V 0402
2F2L	2238 869 15109	10pF 5% 50V 0402
2F34	2238 869 15109	10pF 5% 50V 0402
2F35	2238 869 15109	10pF 5% 50V 0402
2F36	2020 552 96618	1nF 10% 50V 0402
2F37	2020 552 96618	1nF 10% 50V 0402
2F38	2020 552 96618	1nF 10% 50V 0402
2F39	2020 552 96618	1nF 10% 50V 0402
2F40	2020 552 96618	1nF 10% 50V 0402
2F41	2020 552 96618	1nF 10% 50V 0402
2F42	2020 552 96618	1nF 10% 50V 0402
2F43	2020 552 96618	1nF 10% 50V 0402
2F53	2238 869 15101	100pF 5% 50V 0402
2F5A	2020 552 96628	10nF 10% 16V 0402
2F5B	2020 552 96628	10nF 10% 16V 0402
2F5C	2020 552 96628	10nF 10% 16V 0402
2F5D	2020 552 96628	10nF 10% 16V 0402
2F5E	2020 552 96628	10nF 10% 16V 0402
2F5F	2020 552 96637	10µF 10% 6.3V 0805
2F5G	2020 552 96628	10nF 10% 16V 0402
2F5H	2020 552 96628	10nF 10% 16V 0402
2F5J	2020 552 96628	10nF 10% 16V 0402
2F5K	2020 552 96637	10µF 10% 6.3V 0805
2F5L	2020 552 96628	10nF 10% 16V 0402
2F5M	2020 552 96628	10nF 10% 16V 0402
2F5N	2022 552 05888	100nF 10% 16V
2F5P	2022 552 05888	100nF 10% 16V
2F5Q	2238 869 15101	100pF 5% 50V 0402
2F5R	2238 586 59812	100nF 20% 50V 0603
2F5S	2022 552 05679	1µF 10% 16V 0805
2F5T	2020 004 00003	330µF 20% 6.3V
2F5U	2238 586 59812	100nF 20% 50V 0603
2F5W	2020 552 96628	10nF 10% 16V 0402
2F5Y	2020 552 96628	10nF 10% 16V 0402
2F5Z	5322 124 41945	22µF 20% 35V
2F6A	2020 552 96628	10nF 10% 16V 0402
2F6B	2020 552 96628	10nF 10% 16V 0402
2F6C	2020 552 96628	10nF 10% 16V 0402
2F6D	2020 552 96628	10nF 10% 16V 0402
2F6E	2022 552 05679	1µF 10% 16V 0805
2F6F	2238 586 59812	100nF 20% 50V 0603
2F6G	2238 869 15101	100pF 5% 50V 0402
2F78	2238 869 15101	100pF 5% 50V 0402
2F95	2238 586 59812	100nF 20% 50V 0603
2FD1	2238 586 59812	100nF 20% 50V 0603
2FD4	2238 586 59812	100nF 20% 50V 0603
2FGA	2020 552 96628	10nF 10% 16V 0402
2FGB	2020 552 96628	10nF 10% 16V 0402
2FGC	2020 552 96628	10nF 10% 16V 0402
2FGD	2020 552 96628	10nF 10% 16V 0402
2FGE	2020 552 96628	10nF 10% 16V 0402
2FGF	2022 552 05888	100nF 10% 16V
2FGG	2020 552 96628	10nF 10% 16V 0402
2FGH	2022 552 05888	100nF 10% 16V
2FGJ	2020 552 96628	10nF 10% 16V 0402
2FGM	2022 552 05888	100nF 10% 16V
2FGN	2020 552 96628	10nF 10% 16V 0402
2FGP	2022 552 05888	100nF 10% 16V
2FH1	2022 552 05679	1µF 10% 16V 0805
2FH2	2020 552 96628	10nF 10% 16V 0402
2FH3	2020 552 96628	10nF 10% 16V 0402
2FH4	2020 552 96628	10nF 10% 16V 0402
2FH5	2020 552 96628	10nF 10% 16V 0402
2FHA	2020 552 00004	4.7µF 10% 6.3V 0603
2FHB	2022 552 05679	1µF 10% 16V 0805
2FHC	2020 552 96628	10nF 10% 16V 0402
2FHD	2020 552 96628	10nF 10% 16V 0402
2FHE	2020 552 96628	10nF 10% 16V 0402
2FHF	2020 552 96628	10nF 10% 16V 0402
2FHG	2020 552 96628	10nF 10% 16V 0402
2FHH	2020 552 96628	10nF 10% 16V 0402
2FHJ	2020 552 96628	10nF 10% 16V 0402
2FHK	2020 552 96628	10nF 10% 16V 0402
2FHL	4822 124 12108	100µF 20% 4V
2FHM	2020 552 96738	47µF 6.3V
2FHN	2022 552 05679	1µF 10% 16V 0805
2FHP	2020 552 96628	10nF 10% 16V 0402
2FHQ	2020 552 96628	10nF 10% 16V 0402
2FHR	2020 552 96628	10nF 10% 16V 0402
2FHS	2020 552 96628	10nF 10% 16V 0402
2FJ7	2020 552 96628	10nF 10% 16V 0402
2FJ8	2020 552 00004	4.7µF 10% 6.3V 0603
2FJ9	2022 552 05888	100nF 10% 16V
2FJA	2022 552 05888	100nF 10% 16V
2FJB	2022 552 05888	100nF 10% 16V
2FJC	2022 552 05888	100nF 10% 16V
2FJD	2022 552 05888	100nF 10% 16V
2FJE	2022 552 05888	100nF 10% 16V
2FJF	2022 552 05888	100nF 10% 16V
2FJK	2020 552 96628	10nF 10% 16V 0402
2FJL	2020 552 96628	10nF 10% 16V 0402
2FJP	2020 552 00004	4.7µF 10% 6.3V 0603
2FLC	2020 552 00004	4.7µF 10% 6.3V 0603
2FLD	2022 552 05888	100nF 10% 16V
2FLE	2022 552 05888	100nF 10% 16V
2FLF	2022 552 05888	100nF 10% 16V
2FLG	2238 869 15101	100pF 5% 50V 0402
2FLH	2238 869 15101	100pF 5% 50V 0402
2FLJ	2238 869 15101	100pF 5% 50V 0402
2FLK	2020 552 96628	10nF 10% 16V 0402
2FLL	2238 869 15101	100pF 5% 50V 0402
2FLM	2020 552 96628	10nF 10% 16V 0402
2FLN	2020 552 96628	10nF 10% 16V 0402
2FLP	2020 552 96628	10nF 10% 16V 0402
2FLR	2020 552 96628	10nF 10% 16V 0402
2FLS	2020 552 96628	10nF 10% 16V 0402
2FLT	2020 552 96628	10nF 10% 16V 0402
2FLU	2020 552 96628	10nF 10% 16V 0402
2FLV	2020 552 96628	10nF 10% 16V 0402
2FLW	2020 552 96628	10nF 10% 16V 0402
2FLY	2020 552 96628	10nF 10% 16V 0402
2FLZ	2020 552 96628	10nF 10% 16V 0402
2U00	2238 586 59812	100nF 20% 50V 0603
2U01	2020 552 00211	22µF 10% 16V 1210
2U02	2020 552 00211	22µF 10% 16V 1210
2U04	3198 035 03320	3.3nF 5% 50V 0402
2U05	2020 552 00397	1µF 10% 16V
2U07	2238 586 59812	100nF 20% 50V 0603
2U08	3198 035 03320	3.3nF 5% 50V 0402
2U09	2020 552 96738	47µF 6.3V
2U11	2020 552 00397	1µF 10% 16V
2U13	2020 552 96618	1nF 10% 50V 0402
2U14	2020 552 96738	47µF 6.3V
2U15	3198 035 03320	3.3nF 5% 50V 0402
2U16	2020 552 96618	1nF 10% 50V 0402
2U18	2238 586 59812	100nF 20% 50V 0603
2U19	2238 586 59812	100nF 20% 50V 0603
2U20	2238 586 59812	100nF 20% 50V 0603
2U23	2238 586 59812	100nF 20% 50V 0603
2U24	3198 035 03320	3.3nF 5% 50V 0402
2U26	2238 586 59812	100nF 20% 50V 0603
2U27	2020 552 96618	1nF 10% 50V 0402
2U28	2020 552 96618	1nF 10% 50V 0402
2U29	2020 552 00397	1µF 10% 16V
2U30	2020 552 96868	1µF 10% 6V3 0402
2U31	2020 552 96868	1µF 10% 6V3 0402
2U32	2022 031 00308	22µF 20% 35V
2U34	2238 869 15101	100pF 5% 50V 0402
2U35	2022 031 00308	22µF 20% 35V
2U36	2238 869 15101	100pF 5% 50V 0402
2U37	2238 586 59812	100nF 20% 50V 0603
2U38	2022 031 00308	22µF 20% 35V
2U39	2020 552 00397	1µF 10% 16V
2U40	2020 552 96868	1µF 10% 6V3 0402
2U41	2022 031 00308	22µF 20% 35V
2V00	2022 552 05888	100nF 10% 16V
2V01	2022 552 05888	100nF 10% 16V
2V03	2238 586 59812	100nF 20% 50V 0603
2V04	2020 552 96618	1nF 10% 50V 0402
2V05	2238 869 15101	100pF 5% 50V 0402
2V33	2238 586 59812	100nF 20% 50V 0603
2V34	5322 124 41945	22µF 20% 35V
2V35	2020 004 00003	330µF 20% 6.3V
2V39	2020 552 96628	10nF 10% 16V 0402
2V40	2020 552 96628	10nF 10% 16V 0402
2V41	2020 552 96628	10nF 10% 16V 0402
2V42	2020 552 96628	10nF 10% 16V 0402
2V43	2020 552 96628	10nF 10% 16V 0402
2V44	2020 552 96628	10nF 10% 16V 0402
2V45	2238 869 15101	100pF 5% 50V 0402
2V46	2022 552 05679	1µF 10% 16V 0805
2V50	2020 552 96628	10nF 10% 16V 0402
2V51	2020 552 96628	10nF 10% 16V 0402
2V52	2020 552 96628	10nF 10% 16V 0402
2V53	2020 552 96628	10nF 10% 16V 0402
2V54	2020 552 96628	10nF 10% 16V 0402
2V55	2020 552 96628	10nF 10% 16V 0402

⌐WW⌐

3CA0	3198 031 02290	22Ω 5% 0.1W 0402
3CA1	3198 031 02290	22Ω 5% 0.1W 0402
3CA2	3198 031 02290	22Ω 5% 0.1W 0402
3CA3	3198 031 02290	22Ω 5% 0.1W 0402
3CA4	3198 031 02290	22Ω 5% 0.1W 0402
3CA5	3198 031 02290	22Ω 5% 0.1W 0402
3CA6	3198 031 02290	22Ω 5% 0.1W 0402
3CA7	3198 031 02290	22Ω 5% 0.1W 0402
3CA8	3198 031 02290	22Ω 5% 0.1W 0402
3CA9	3198 031 02290	22Ω 5% 0.1W 0402
3CB0	3198 031 02290	22Ω 5% 0.1W 0402
3CB1	3198 031 02290	22Ω 5% 0.1W 0402

3CB2	3198 031 02290	22Ω 5% 0.1W 0402
3CB3	3198 031 02290	22Ω 5% 0.1W 0402
3CB4	3198 031 02290	22Ω 5% 0.1W 0402
3CB5	3198 031 02290	22Ω 5% 0.1W 0402
3CB6	3198 031 02290	22Ω 5% 0.1W 0402
3CB7	3198 031 02290	22Ω 5% 0.1W 0402
3CB8	3198 031 02290	22Ω 5% 0.1W 0402
3CB9	3198 031 02290	22Ω 5% 0.1W 0402
3CC0	3198 031 02290	22Ω 5% 0.1W 0402
3CC1	3198 031 02290	22Ω 5% 0.1W 0402
3CC2	3198 031 02290	22Ω 5% 0.1W 0402
3CC3	3198 031 02290	22Ω 5% 0.1W 0402
3CC4	3198 031 02290	22Ω 5% 0.1W 0402
3CC5	3198 031 02290	22Ω 5% 0.1W 0402
3CC6	3198 031 02290	22Ω 5% 0.1W 0402
3CC7	3198 031 02290	22Ω 5% 0.1W 0402
3CC8	3198 031 02290	22Ω 5% 0.1W 0402
3CC9	3198 031 02290	22Ω 5% 0.1W 0402
3CD0	3198 031 02290	22Ω 5% 0.1W 0402
3CD1	3198 031 02290	22Ω 5% 0.1W 0402
3CD2	3198 031 02290	22Ω 5% 0.1W 0402
3CD3	3198 031 02290	22Ω 5% 0.1W 0402
3CD4	3198 031 02290	22Ω 5% 0.1W 0402
3CD5	3198 031 02290	22Ω 5% 0.1W 0402
3CD6	2322 706 75601	560Ω 1% 0402
3CD7	2322 706 75601	560Ω 1% 0402
3CD8	2322 706 75601	560Ω 1% 0402
3CD9	2322 706 75601	560Ω 1% 0402
3CE1	4822 117 13596	220Ω 5% 0.01W 0402
3CE2	4822 117 13596	220Ω 5% 0.01W 0402
3F02	4822 117 13543	470Ω 5% 0402
3F04	4822 117 13543	470Ω 5% 0402
3F06	4822 117 13543	470Ω 5% 0402
3F08	4822 117 13543	470Ω 5% 0402
3F10	4822 117 13543	470Ω 5% 0402
3F14	4822 117 13606	10kΩ 5% 0.01W 0402
3F18	3198 031 04720	4.7kΩ 5% 0402
3F19	4822 117 13546	47Ω 5% 0402
3F1W	3198 031 04730	47Ω 5% 0402
3F1Y	3198 031 04730	47Ω 5% 0402
3F1Z	4822 117 13606	10kΩ 5% 0.01W 0402
3F20	4822 117 13546	47Ω 5% 0402
3F21	4822 117 13606	10kΩ 5% 0.01W 0402
3F22	4822 117 13546	47Ω 5% 0402
3F27	4822 117 13546	47Ω 5% 0402
3F28	4822 117 13546	47Ω 5% 0402
3F29	4822 117 13546	47Ω 5% 0402
3F2D	4822 117 13602	2.2kΩ 5% 0.01W 0402
3F2F	4822 117 13546	47Ω 5% 0402
3F2V	4822 117 13606	10kΩ 5% 0.01W 0402
3F31	4822 117 13546	47Ω 5% 0402
3F49	4822 117 13546	47Ω 5% 0402
3F4A	4822 117 13596	220Ω 5% 0.01W 0402
3F4B	2322 706 75601	560Ω 1% 0402
3F4C	2322 706 75601	560Ω 1% 0402
3F4D	2322 706 75601	560Ω 1% 0402
3F4E	2322 706 75601	560Ω 1% 0402
3F4F	4822 117 13596	220Ω 5% 0.01W 0402
3F4G	3198 031 02290	22Ω 5% 0.1W 0402
3F4H	3198 031 02290	22Ω 5% 0.1W 0402
3F4J	3198 031 02290	22Ω 5% 0.1W 0402
3F4K	3198 031 02290	22Ω 5% 0.1W 0402
3F4L	3198 031 02290	22Ω 5% 0.1W 0402
3F4M	3198 031 02290	22Ω 5% 0.1W 0402
3F4N	3198 031 02290	22Ω 5% 0.1W 0402
3F4P	3198 031 02290	22Ω 5% 0.1W 0402
3F4Q	3198 031 02290	22Ω 5% 0.1W 0402
3F4R	3198 031 02290	22Ω 5% 0.1W 0402
3F4S	3198 031 02290	22Ω 5% 0.1W 0402
3F4T	3198 031 02290	22Ω 5% 0.1W 0402
3F4U	3198 031 02290	22Ω 5% 0.1W 0402
3F4V	3198 031 02290	22Ω 5% 0.1W 0402
3F4W	3198 031 02290	22Ω 5% 0.1W 0402
3F4Y	3198 031 02290	22Ω 5% 0.1W 0402
3F4Z	3198 031 02290	22Ω 5% 0.1W 0402
3F51	3198 031 01810	180Ω 5% 0402
3F54	3198 031 01810	180Ω 5% 0402
3F57	3198 031 01810	180Ω 5% 0402
3F5A	3198 031 02290	22Ω 5% 0.1W 0402
3F5B	3198 031 02290	22Ω 5% 0.1W 0402
3F5C	3198 031 02290	22Ω 5% 0.1W 0402
3F5D	3198 031 02290	22Ω 5% 0.1W 0402
3F5E	3198 031 02290	22Ω 5% 0.1W 0402
3F5F	3198 031 02290	22Ω 5% 0.1W 0402
3F5G	3198 031 02290	22Ω 5% 0.1W 0402
3F5H	3198 031 02290	22Ω 5% 0.1W 0402
3F5J	3198 031 02290	22Ω 5% 0.1W 0402
3F5K	3198 031 02290	22Ω 5% 0.1W 0402
3F5L	3198 031 02290	22Ω 5% 0.1W 0402
3F5M	3198 031 02290	22Ω 5% 0.1W 0402
3F5N	3198 031 02290	22Ω 5% 0.1W 0402
3F5P	3198 031 02290	22Ω 5% 0.1W 0402
3F5Q	3198 031 02290	22Ω 5% 0.1W 0402
3F5R	3198 031 02290	22Ω 5% 0.1W 0402
3F5S	3198 031 02290	22Ω 5% 0.1W 0402
3F5T	3198 031 02290	22Ω 5% 0.1W 0402
3F5W	3198 031 01810	180Ω 5% 0402
3F60	3198 031 01810	180Ω 5% 0402
3F64	3198 031 01810	180Ω 5% 0402
3F66	3198 031 01810	180Ω 5% 0402
3F69	3198 031 01810	180Ω 5% 0402
3F6C	3198 031 01810	180Ω 5% 0402
3F6D	3198 031 02290	22Ω 5% 0.1W 0402
3F70	3198 031 01810	180Ω 5% 0402
3F72	3198 031 03320	3.3kΩ 5% 0402
3F73	4822 117 13606	10kΩ 5% 0.01W 0402
3F74	4822 117 11297	100kΩ 5% 0.1W
3F75	4822 117 11297	100kΩ 5% 0.1W
3F78	4822 117 13548	1kΩ 5% 0402
3F79	4822 117 13548	1kΩ 5% 0402
3F7K	3198 031 01810	180Ω 5% 0402
3F7N	3198 031 01810	180Ω 5% 0402
3F7Q	3198 031 01810	180Ω 5% 0402
3F80	4822 117 13545	100Ω 1% 0402
3F81	4822 117 13606	10kΩ 5% 0.01W 0402
3F82	4822 117 13545	100Ω 1% 0402
3F84	4822 117 13545	100Ω 1% 0402
3F85	4822 117 13545	100Ω 1% 0402
3F86	4822 117 13548	1kΩ 5% 0402
3F87	4822 117 13545	100Ω 1% 0402
3F88	4822 117 13545	100Ω 1% 0402
3F89	4822 117 13545	100Ω 1% 0402
3F8C	3198 031 01810	180Ω 5% 0402
3F8F	3198 031 01810	180Ω 5% 0402
3F8J	3198 031 01810	180Ω 5% 0402
3F8L	3198 031 01810	180Ω 5% 0402
3F8Q	3198 031 01810	180Ω 5% 0402
3F8T	3198 031 01810	180Ω 5% 0402
3F8W	3198 031 01810	180Ω 5% 0402
3F90	4822 117 13545	100Ω 1% 0402
3F91	4822 117 13545	100Ω 1% 0402
3F94	3198 031 01810	180Ω 5% 0402
3F96	4822 117 13545	100Ω 1% 0402
3F97	4822 117 13545	100Ω 1% 0402
3F98	4822 117 13545	100Ω 1% 0402
3F9N	3198 031 01810	180Ω 5% 0402
3F9R	3198 031 01810	180Ω 5% 0402
3F9U	3198 031 01810	180Ω 5% 0402
3F9Y	3198 031 01810	180Ω 5% 0402
3FA0	4822 117 13546	47Ω 5% 0402
3FA1	4822 117 13545	100Ω 1% 0402
3FA2	4822 117 13545	100Ω 1% 0402
3FA4	4822 117 13545	100Ω 1% 0402
3FA5	4822 117 13545	100Ω 1% 0402
3FA6	4822 117 13545	100Ω 1% 0402
3FA7	4822 117 13606	10kΩ 5% 0.01W 0402
3FH0	4822 117 13545	100Ω 1% 0402
3FH1	4822 117 13545	100Ω 1% 0402
3FH4	4822 117 13546	47Ω 5% 0402
3FH5	4822 117 13546	47Ω 5% 0402
3FH7	4822 117 13545	100Ω 1% 0402
3FH8	4822 117 13545	100Ω 1% 0402
3FH9	4822 117 13545	100Ω 1% 0402
3FHI	4822 117 13545	100Ω 1% 0402
3FHK	3198 031 01810	180Ω 5% 0402
3FHN	3198 031 01810	180Ω 5% 0402
3FHS	3198 031 01810	180Ω 5% 0402
3FJC	3198 031 03390	33Ω 1% 0402
3FJD	4822 117 13546	47Ω 5% 0402
3FLB	4822 117 13546	47Ω 5% 0402
3U00	4822 117 13606	10kΩ 5% 0.01W 0402
3U01	5322 117 11726	10Ω 5%
3U03	4822 117 13605	Jumper 0402
3U05	4822 117 13606	10kΩ 5% 0.01W 0402
3U06	3198 031 02290	22Ω 5% 0.1W 0402
3U07	4822 117 13545	100Ω 1% 0402
3U08	3198 031 02290	22Ω 5% 0.1W 0402
3U09	3198 031 02290	22Ω 5% 0.1W 0402
3U10	3198 031 02290	22Ω 5% 0.1W 0402
3U11	3198 031 02290	22Ω 5% 0.1W 0402
3U12	4822 117 13606	10kΩ 5% 0.01W 0402
3U13	4822 117 13606	10kΩ 5% 0.01W 0402
3U14	4822 117 13601	22kΩ 5% 0402
3U15	3198 031 04780	4.7Ω 5% 0402
3U16	3198 031 02290	22Ω 5% 0.1W 0402
3U17	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U18	4822 117 13543	470Ω 5% 0402
3U19	4822 117 13605	Jumper 0402
3U20	3198 031 02290	22Ω 5% 0.1W 0402
3U21	3198 031 04780	4.7Ω 5% 0402
3U22	3198 031 04780	4.7Ω 5% 0402
3U23	3198 031 04780	4.7Ω 5% 0402
3U24	4822 117 13548	1kΩ 5% 0402
3U26	3198 031 03320	3.3kΩ 5% 0402
3U27	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U28	2322 706 72201	220Ω 1% 0402
3U30	4822 117 13606	10kΩ 5% 0.01W 0402
3U31	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U32	3198 031 03930	39kΩ 5% 0402
3U33	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U36	3198 031 03320	3.3kΩ 5% 0402
3U37	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U40	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U41	4822 117 13545	100Ω 1% 0402
3U43	3198 031 03320	3.3kΩ 5% 0402
3U44	4822 117 13606	10kΩ 5% 0.01W 0402
3U45	3198 031 06890	68Ω 5% 0402
3U46	3198 031 02290	22Ω 5% 0.1W 0402
3U47	2322 706 71001	100Ω 1% 0402
3U48	3198 031 06890	68Ω 5% 0402
3U50	4822 117 13548	1kΩ 5% 0402
3U55	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U58	4822 117 13606	10kΩ 5% 0.01W 0402
3U59	3198 031 02720	2.7kΩ 5% 0.01W 0402
3U62	4822 117 13543	470Ω 5% 0402
3U63	4822 117 13548	1kΩ 5% 0402
3U64	4822 117 13602	2.2kΩ 5% 0.01W 0402
3U69	2322 706 71002	1kΩ 1% 0402
3U70	2322 706 74701	470Ω 1% 0402
3U73	2322 706 71001	100Ω 1% 0402
3U74	2322 706 74701	470Ω 1% 0402
3U75	3198 031 06820	6.8kΩ 5% 0.01W 0402
9F00	4822 117 13605	Jumper 0402
9F01	4822 117 13605	Jumper 0402
9F02	4822 117 13605	Jumper 0402
9F03	4822 117 13605	Jumper 0402
9F04	4822 117 13605	Jumper 0402
9F06	4822 117 13605	Jumper 0402
9F07	4822 117 13605	Jumper 0402
9F2U	4822 117 13605	Jumper 0402
9U03	4822 117 13605	Jumper 0402

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5F00	2422 549 45325	Bead 67Ω at 100MHz
5F01	2422 549 45325	Bead 67Ω at 100MHz
5F02	2422 549 45325	Bead 67Ω at 100MHz
5F03	2422 549 45325	Bead 67Ω at 100MHz
5F04	2422 549 45325	Bead 67Ω at 100MHz
5F05	2422 549 45325	Bead 67Ω at 100MHz
5F06	2422 549 45325	Bead 67Ω at 100MHz
5F07	2422 549 45325	Bead 67Ω at 100MHz
5F08	2422 549 45325	Bead 67Ω at 100MHz
5F09	2422 549 45325	Bead 67Ω at 100MHz
5F0A	2422 549 45325	Bead 67Ω at 100MHz
5F0B	2422 549 45325	Bead 67Ω at 100MHz
5F0K	2422 549 44197	Bead 220Ω at 100MHz
5F0L	2422 549 44197	Bead 220Ω at 100MHz
5F0M	2422 549 44197	Bead 220Ω at 100MHz
5F22	2422 549 43769	Bead 30Ω at 100MHz
5F24	2422 549 43769	Bead 30Ω at 100MHz
5F25	2422 549 43769	Bead 30Ω at 100MHz
5F27	2422 549 44197	Bead 220Ω at 100MHz
5F28	2422 549 44197	Bead 220Ω at 100MHz
5F50	2422 549 43769	Bead 30Ω at 100MHz
5F52	2422 549 43769	Bead 30Ω at 100MHz
5F53	2422 549 43769	Bead 30Ω at 100MHz
5F54	2422 549 43769	Bead 30Ω at 100MHz
5F55	2422 549 43769	Bead 30Ω at 100MHz
5F57	2422 549 43769	Bead 30Ω at 100MHz
5F59	2422 549 45325	Bead 67Ω at 100MHz
5F60	2422 549 45325	Bead 67Ω at 100MHz
5F61	2422 549 45325	Bead 67Ω at 100MHz
5F62	2422 549 45325	Bead 67Ω at 100MHz
5F63	2422 549 45325	Bead 67Ω at 100MHz
5F64	2422 549 45325	Bead 67Ω at 100MHz
5F65	2422 549 45325	Bead 67Ω at 100MHz
5F66	2422 549 45325	Bead 67Ω at 100MHz
5F67	2422 549 45325	Bead 67Ω at 100MHz
5F68	2422 549 45325	Bead 67Ω at 100MHz
5F69	2422 549 45325	Bead 67Ω at 100MHz
5F70	2422 549 45325	Bead 67Ω at 100MHz
5F71	2422 549 45325	Bead 67Ω at 100MHz
5F72	2422 549 45325	Bead 67Ω at 100MHz
5F78	2422 549 45325	Bead 67Ω at 100MHz
5F79	2422 549 45325	Bead 67Ω at 100MHz
5F80	2422 549 43769	Bead 30Ω at 100MHz
5U00	2422 536 00779	10µH 20%
5U01	2422 536 00671	10µH 20%
5U02	2422 536 00671	10µH 20%
5U04	2422 549 44197	Bead 220Ω at 100MHz
5U05	2422 549 44197	Bead 220Ω at 100MHz
5U06	2422 549 44197	Bead 220Ω at 100MHz
5U07	2422 549 44197	Bead 220Ω at 100MHz
5V01	2422 549 44197	Bead 220Ω at 100MHz
5V02	2422 549 44197	Bead 220Ω at 100MHz

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6F07	9322 134 46685	SML-310MT

6F10	9322 134 46685	SML-310MT
6F30	9322 134 46685	SML-310MT
6F31	9322 134 46685	SML-310MT
6F32	9322 134 46685	SML-310MT
6F33	9322 134 46685	SML-310MT
6F34	9322 134 46685	SML-310MT
6F35	9322 134 46685	SML-310MT
6U00	4822 130 11397	BAS316
6U04	4822 130 11397	BAS316
6U06	4822 130 11397	BAS316
6U08	4822 130 11152	UDZ18B



7CA0	9322 249 67671	EDD1216AJTA
7CA1	9322 249 67671	EDD1216AJTA
7CA2	9322 249 67671	EDD1216AJTA
7CA3	9322 249 67671	EDD1216AJTA
7F07	9322 204 71668	SI4835BDY
7F08	3198 010 42310	BC847BW
7F18	9322 225 54671	EP2C35F484C7N
7F30	9322 225 53668	EPCS16SI16N
7F32	3198 010 42310	BC847BW
7F85	2722 171 08817	Xtal 27MHz DSO751SV
7U00	9322 207 46668	NCP5422AD
7U01	9322 242 20668	PowFET SM FDS6982
7U03	9322 242 20668	PowFET SM FDS6982
7U07	9340 219 30115	BC817-25W
7U08	9322 163 24668	L78M08CDT
7U09	4822 209 17398	LD1117DT33
7U13	9340 425 30115	BC847BPN
7U15	9340 425 20115	BC847BS

Small Signal Board [B] 3104 328 52162

Various

1006	2422 026 05751	Socket Cinch 3p f YeWhRd
1007	4822 265 11391	Connetor SVHS 4p f
1008	2422 026 05779	Socket Cinch 3p f GnBuRd
1009	2422 026 05779	Socket Cinch 3p f GnBuRd
1011	2422 026 05751	Socket Cinch 3p f YeWhRd
1060	2422 026 05966	Socket Cinch 1p f Wh
1061	2422 026 05967	Socket Cinch 1p f Rd
1735	2422 025 09406	Connector 4p m
1B01	2422 033 00552	Socket HDMI 19p f
1B02	2422 033 00552	Socket HDMI 19p f
1B03	2422 033 00552	Socket HDMI 19p f
1B32	2422 086 00717	Fuse 1.6A T 250V
1B33	2422 086 00797	Fuse 2.5A T 125V
1B40	2422 025 18779	Connector 4p m
1B50	2422 086 00791	Fuse 3A T 125V
1C00	2422 026 05539	Socket Cinch 2p f WhRd
1C01	2422 026 05539	Socket Cinch 2p f WhRd
1C03	2422 026 05622	Socket Cinch 2p f
1FA0	2422 025 17274	Connector 10p m
1G50	2422 025 18973	Conn. 41p f 0.5 smd
1GE1	2422 540 00017	Reson. 60MHz CSTCW
1H01	4822 267 10565	Connector 4p
1HE2	2422 025 18738	Connector 3p m
1HF0	2422 543 01397	Xtal 27MHz 18pF
1HP0	2422 025 18738	Connector 3p m
1M15	2422 026 05703	Socket Cinch 1p f
1M20	4822 267 10618	Connector 7p
1M36	2422 025 10655	Connector 11p m
1M59	2422 025 19265	Connector 5p m Bk
1N01	2422 543 01095	Res. 12MHz DSX840
1P02	2422 025 16374	Connector 2p m
1P11	4822 265 11352	Connector 8p
1T04	3112 297 15361	Tuner TD1736F/FHFXP
1T06	2422 549 01546	SAW 45MHz M1867D
1T55	2422 549 01428	SAW 44MHz X6931N
1T69	2422 543 01612	Xtal 54MHz 10P U4

2B20	2238 869 15101	100pF 5% 50V 0402
2B21	2020 552 96628	10nF 10% 16V 0402
2B22	2020 552 96628	10nF 10% 16V 0402
2B23	2020 552 96628	10nF 10% 16V 0402
2B24	2020 552 96628	10nF 10% 16V 0402
2B25	2020 552 96628	10nF 10% 16V 0402
2B26	2238 869 15101	100pF 5% 50V 0402
2B30	2222 339 22224	220nF 20% 275V
2B32	2238 930 15625	1n5 10% 200V
2B33	3198 034 05690	56pF 1% 50V 0402
2B34	2238 869 15101	100pF 5% 50V 0402
2B35	2238 869 15109	10pF 5% 50V 0402
2B38	2222 780 15663	1µF 10% 0805
2B39	2222 780 15663	1µF 10% 0805
2B40	2222 780 15663	1µF 10% 0805
2B41	2020 552 96326	220nF 10% 16V
2B42	2020 552 96326	220nF 10% 16V
2B43	3198 017 34730	47nF 16V 0603
2B47	4822 124 80061	1000µF 20% 25V
2B49	4822 123 14025	2200µF 20% 16V
2B50	2022 020 01021	68µF 20% 450V
2B52	2022 554 04155	470pF 20% 250V
2B53	2238 869 15101	100pF 5% 50V 0402
2B54	2238 869 15101	100pF 5% 50V 0402
2B55	2020 552 00291	10µF 20% 6V3 0603
2B56	3198 017 34730	47nF 16V 0603
2B57	2222 780 15663	1µF 10% 0805
2B58	2222 780 15663	1µF 10% 0805
2B59	4822 126 14583	470nF 10% 16V 0805
2B60	2020 558 00005	10nF 10% 630V 1206
2B61	2020 552 96623	2.2nF 10% 50V 0402
2B62	2222 780 15663	1µF 10% 0805
2B63	2238 586 59812	100nF 20% 50V 0603
2D00	4822 124 81144	1000µF 16V
2D01	2222 780 15663	1µF 10% 0805
2D02	2238 586 59812	100nF 20% 50V 0603
2D04	2238 869 15109	10pF 5% 50V 0402
2D05	2238 586 59812	100nF 20% 50V 0603
2D07	2020 552 96618	1nF 10% 50V 0402
2D08	2020 552 96623	2.2nF 10% 50V 0402
2D09	2020 552 96623	2.2nF 10% 50V 0402
2D10	2020 552 96628	10nF 10% 16V 0402
2D11	2222 780 15663	1µF 10% 0805
2D12	2238 869 15109	10pF 5% 50V 0402
2D13	4822 126 14519	22pF 5% 50V 0402
2D14	4822 126 14519	22pF 5% 50V 0402
2D15	2238 586 59812	100nF 20% 50V 0603
2D17	2020 552 96618	1nF 10% 50V 0402
2D18	4822 126 14583	470nF 10% 16V 0805
2D19	2020 552 96623	2.2nF 10% 50V 0402
2D20	4822 126 14583	470nF 10% 16V 0805
2D21	2020 552 96628	10nF 10% 16V 0402
2D22	2020 552 96623	2.2nF 10% 50V 0402
2D23	2020 552 96623	2.2nF 10% 50V 0402
2D24	4822 123 14026	470µF 20% 35V
2D25	2238 586 59812	100nF 20% 50V 0603
2D26	2222 780 15663	1µF 10% 0805
2D27	2020 552 96628	10nF 10% 16V 0402
2D28	2222 780 15663	1µF 10% 0805
2D29	4822 124 81144	1000µF 16V
2D30	2238 916 11552	1.5nF 5% 25V 0603
2D31	2238 916 11552	1.5nF 5% 25V 0603
2D32	2222 780 15663	1µF 10% 0805
2D33	2238 916 11552	1.5nF 5% 25V 0603
2D34	2238 916 11552	1.5nF 5% 25V 0603
2D35	2222 780 15663	1µF 10% 0805
2D36	2238 586 59812	100nF 20% 50V 0603
2D37	2238 586 59812	100nF 20% 50V 0603
2D39	4822 123 14026	470µF 20% 35V
2D40	2020 552 96623	2.2nF 10% 50V 0402
2D44	2238 869 15109	10pF 5% 50V 0402
2D72	2222 780 15663	1µF 10% 0805
2D73	2020 552 00291	10µF 20% 6V3 0603
2D74	4822 051 30008	Jumper 0603
2E06	2238 869 15101	100pF 5% 50V 0402
2E07	2238 869 15101	100pF 5% 50V 0402
2E14	2238 869 15101	100pF 5% 50V 0402
2E15	2238 869 15101	100pF 5% 50V 0402
2E16	2238 586 59812	100nF 20% 50V 0603
2E17	2238 586 59812	100nF 20% 50V 0603
2E20	2238 869 15101	100pF 5% 50V 0402
2E21	2238 869 15101	100pF 5% 50V 0402
2E26	2238 869 15101	100pF 5% 50V 0402
2E27	2238 869 15101	100pF 5% 50V 0402
2E28	2238 869 15101	100pF 5% 50V 0402
2E32	2238 869 15101	100pF 5% 50V 0402
2E33	2238 869 15101	100pF 5% 50V 0402
2E34	2238 869 15101	100pF 5% 50V 0402
2E35	2238 869 15101	100pF 5% 50V 0402
2E36	2238 869 15101	100pF 5% 50V 0402
2E37	2238 869 15101	100pF 5% 50V 0402
2E90	2238 869 15101	100pF 5% 50V 0402
2E91	2238 869 15101	100pF 5% 50V 0402
2E92	2020 552 96618	1nF 10% 50V 0402
2E93	2020 552 96618	1nF 10% 50V 0402
2E94	2238 869 15101	100pF 5% 50V 0402
2E95	2238 869 15101	100pF 5% 50V 0402
2FA0	2020 552 96834	1µF 20% 6.3V 0402
2FA1	2020 552 96628	10nF 10% 16V 0402
2FA2	2020 552 96628	10nF 10% 16V 0402
2FA3	2020 552 96628	10nF 10% 16V 0402
2FA4	2020 552 96628	10nF 10% 16V 0402
2FA5	2238 586 59812	100nF 20% 50V 0603
2FA6	2020 552 96834	1µF 20% 6.3V 0402
2FA7	2020 552 96628	10nF 10% 16V 0402
2FA8	2238 586 59812	100nF 20% 50V 0603
2FA9	2020 552 00004	4.7µF 10% 6.3V 0603
2FB0	2020 552 96834	1µF 20% 6.3V 0402
2FB1	2020 552 96628	10nF 10% 16V 0402
2FB2	2020 552 96628	10nF 10% 16V 0402
2FB3	2020 552 96628	10nF 10% 16V 0402
2FB4	2020 552 96628	10nF 10% 16V 0402
2FB5	2020 552 96628	10nF 10% 16V 0402
2FB6	2020 552 96628	10nF 10% 16V 0402
2FB7	2020 552 96628	10nF 10% 16V 0402
2FB9	2020 552 00004	4.7µF 10% 6.3V 0603
2FC0	2020 021 00215	220µF 20% 25V
2FC2	2020 552 96834	1µF 20% 6.3V 0402
2FD0	2020 552 96834	1µF 20% 6.3V 0402
2FD1	2020 552 96628	10nF 10% 16V 0402
2FD2	2020 552 96628	10nF 10% 16V 0402
2FD3	2020 552 96628	10nF 10% 16V 0402
2FD4	2020 552 96628	10nF 10% 16V 0402
2FD5	2020 552 96628	10nF 10% 16V 0402
2FD6	2020 552 96628	10nF 10% 16V 0402
2FD7	2020 552 96628	10nF 10% 16V 0402
2FD8	2020 552 96628	10nF 10% 16V 0402
2FD9	2020 552 96628	10nF 10% 16V 0402
2FE0	2020 552 00004	4.7µF 10% 6.3V 0603
2FE1	2020 552 96628	10nF 10% 16V 0402
2FE2	2020 552 96628	10nF 10% 16V 0402
2FE3	2020 552 96628	10nF 10% 16V 0402
2FE4	2020 552 96628	10nF 10% 16V 0402
2FE5	2020 552 96628	10nF 10% 16V 0402
2FE6	2020 552 96628	10nF 10% 16V 0402
2FE7	2020 552 96628	10nF 10% 16V 0402
2FF0	2020 552 96834	1µF 20% 6.3V 0402
2FF1	2020 552 96628	10nF 10% 16V 0402
2FF2	2020 552 96628	10nF 10% 16V 0402
2FF3	2020 552 96628	10nF 10% 16V 0402
2FF4	2020 552 96628	10nF 10% 16V 0402
2FF6	2020 552 96628	10nF 10% 16V 0402
2FF7	2020 552 96628	10nF 10% 16V 0402
2G00	3198 034 04780	4.7pF 50V NP0 0402
2G01	3198 034 04780	4.7pF 50V NP0 0402
2G02	3198 034 04780	4.7pF 50V NP0 0402
2G03	3198 034 04780	4.7pF 50V NP0 0402
2G04	3198 034 04780	4.7pF 50V NP0 0402
2G05	3198 034 04780	4.7pF 50V NP0 0402
2G06	3198 034 04780	4.7pF 50V NP0 0402
2G07	3198 034 04780	4.7pF 50V NP0 0402
2G08	3198 034 04780	4.7pF 50V NP0 0402
2G09	3198 034 04780	4.7pF 50V NP0 0402
2G10	3198 034 04780	4.7pF 50V NP0 0402
2G11	3198 034 04780	4.7pF 50V NP0 0402
2G12	3198 034 04780	4.7pF 50V NP0 0402
2G13	3198 034 04780	4.7pF 50V NP0 0402
2G14	3198 034 04780	4.7pF 50V NP0 0402
2G15	3198 034 04780	4.7pF 50V NP0 0402
2G16	3198 034 04780	4.7pF 50V NP0 0402
2G17	3198 034 04780	4.7pF 50V NP0 0402
2G18	3198 034 04780	4.7pF 50V NP0 0402
2G19	3198 034 04780	4.7pF 50V NP0 0402
2G20	3198 034 04780	4.7pF 50V NP0 0402
2G21	3198 034 04780	4.7pF 50V NP0 0402
2G22	3198 034 04780	4.7pF 50V NP0 0402
2G23	3198 034 04780	4.7pF 50V NP0 0402
2G52	2238 869 15101	100pF 5% 50V 0402
2G53	2238 869 15101	100pF 5% 50V 0402
2G54	2238 586 59812	100nF 20% 50V 0603
2G55	3198 035 04710	470pF 50V 0402
2G57	2020 552 00152	1µF 10% 6.3V 0402
2G58	2020 552 00152	1µF 10% 6.3V 0402
2G60	2238 586 59812	100nF 20% 50V 0603
2G67	3198 035 04710	470pF 50V 0402
2G68	3198 035 04710	470pF 50V 0402
2G78	3198 035 04710	470pF 50V 0402
2G79	2020 552 00152	1µF 10% 6.3V 0402
2GE0	2020 552 00152	1µF 10% 6.3V 0402
2GE1	2020 552 96628	10nF 10% 16V 0402
2GE2	2020 552 96628	10nF 10% 16V 0402
2GE3	2020 552 96628	10nF 10% 16V 0402
2GE4	2020 552 96628	10nF 10% 16V 0402
2GE5	2020 552 96628	10nF 10% 16V 0402
2GE6	2020 552 96628	10nF 10% 16V 0402
2GE7	2020 552 96628	10nF 10% 16V 0402
2GE8	2020 552 96628	10nF 10% 16V 0402
2GE9	2020 552 96628	10nF 10% 16V 0402
2GF0	2020 552 96628	10nF 10% 16V 0402
2GF1	2020 552 96628	10nF 10% 16V 0402
2GF2	2020 552 96628	10nF 10% 16V 0402
2GF3	2020 552 96628	10nF 10% 16V 0402
2GF4	2020 552 00004	4.7µF 10% 6.3V 0603
2GF5	2020 552 96628	10nF 10% 16V 0402
2GF6	2020 552 96628	10nF 10% 16V 0402
2GF7	2020 552 96628	10nF 10% 16V 0402
2GF8	2020 552 96628	10nF 10% 16V 0402

2GF9	2020 552 96628	10nF 10% 16V 0402
2GG0	2020 552 00152	1µF 10% 6.3V 0402
2GG1	2020 552 96628	10nF 10% 16V 0402
2GG2	2020 552 96628	10nF 10% 16V 0402
2GG3	2020 552 00152	1µF 10% 6.3V 0402
2GG4	2020 552 96628	10nF 10% 16V 0402
2GG5	2020 552 96628	10nF 10% 16V 0402
2GG6	2020 552 96628	10nF 10% 16V 0402
2GG7	2020 552 00152	1µF 10% 6.3V 0402
2GG8	2020 552 96628	10nF 10% 16V 0402
2GG9	2020 552 96628	10nF 10% 16V 0402
2GH0	2020 552 96628	10nF 10% 16V 0402
2GH1	2020 552 00152	1µF 10% 6.3V 0402
2GH2	2020 552 96628	10nF 10% 16V 0402
2GH3	2020 552 96628	10nF 10% 16V 0402
2GH4	2020 552 96628	10nF 10% 16V 0402
2GH5	2020 552 96628	10nF 10% 16V 0402
2GH6	2020 552 00152	1µF 10% 6.3V 0402
2GH7	2020 552 96628	10nF 10% 16V 0402
2GH8	2020 552 96628	10nF 10% 16V 0402
2GH9	2020 552 96628	10nF 10% 16V 0402
2GJ0	2020 552 00004	4.7µF 10% 6.3V 0603
2GJ5	2238 586 59812	100nF 20% 50V 0603
2GJ6	2020 552 00152	1µF 10% 6.3V 0402
2GJ7	2020 552 96628	10nF 10% 16V 0402
2GK0	2238 586 59812	100nF 20% 50V 0603
2GK1	2238 586 59812	100nF 20% 50V 0603
2GK2	4822 124 81058	47µF 20% 4V
2GK3	2020 552 00152	1µF 10% 6.3V 0402
2GK4	2020 552 96628	10nF 10% 16V 0402
2GK5	2020 552 96628	10nF 10% 16V 0402
2GK6	2020 552 96628	10nF 10% 16V 0402
2GL1	2020 552 96628	10nF 10% 16V 0402
2H00	2020 552 96618	1nF 10% 50V 0402
2H01	2238 586 59812	100nF 20% 50V 0603
2H05	2238 586 59812	100nF 20% 50V 0603
2H06	2238 869 15101	100pF 5% 50V 0402
2H07	2238 869 15101	100pF 5% 50V 0402
2H08	2238 586 59812	100nF 20% 50V 0603
2H10	2238 586 59812	100nF 20% 50V 0603
2H90	2238 586 59812	100nF 20% 50V 0603
2HA0	2238 586 59812	100nF 20% 50V 0603
2HA1	2238 586 59812	100nF 20% 50V 0603
2HA2	2238 787 15641	22nF 5% 16V 0402
2HA3	2238 787 15641	22nF 5% 16V 0402
2HA4	2238 787 15641	22nF 5% 16V 0402
2HA5	2238 787 15641	22nF 5% 16V 0402
2HC0	2238 586 59812	100nF 20% 50V 0603
2HC1	2238 586 59812	100nF 20% 50V 0603
2HD0	2238 586 59812	100nF 20% 50V 0603
2HF0	3198 034 02790	47pF 1% 50V 0402
2HF1	3198 034 02790	47pF 1% 50V 0402
2HF2	2238 586 59812	100nF 20% 50V 0603
2HG0	2238 586 59812	100nF 20% 50V 0603
2HG1	2238 586 59812	100nF 20% 50V 0603
2HG2	2238 586 59812	100nF 20% 50V 0603
2HG3	2238 586 59812	100nF 20% 50V 0603
2HG4	2238 586 59812	100nF 20% 50V 0603
2HG5	2238 586 59812	100nF 20% 50V 0603
2HG6	2238 586 59812	100nF 20% 50V 0603
2HG7	2238 586 59812	100nF 20% 50V 0603
2HG8	2238 586 59812	100nF 20% 50V 0603
2HG9	2238 586 59812	100nF 20% 50V 0603
2HGA	2238 586 59812	100nF 20% 50V 0603
2HGB	2238 586 59812	100nF 20% 50V 0603
2HGC	2238 586 59812	100nF 20% 50V 0603
2HGD	2238 586 59812	100nF 20% 50V 0603
2HGE	2238 586 59812	100nF 20% 50V 0603
2HGF	2238 586 59812	100nF 20% 50V 0603
2HGG	2020 552 00235	22µF 20% 6.3V 0805
2HGH	2238 586 59812	100nF 20% 50V 0603
2HGJ	2238 586 59812	100nF 20% 50V 0603
2HGK	2238 586 59812	100nF 20% 50V 0603
2HGM	2238 586 59812	100nF 20% 50V 0603
2HGN	2238 586 59812	100nF 20% 50V 0603
2HGP	2238 586 59812	100nF 20% 50V 0603
2HGR	2238 586 59812	100nF 20% 50V 0603
2HGS	2238 586 59812	100nF 20% 50V 0603
2HGT	2238 586 59812	100nF 20% 50V 0603
2HGU	2238 586 59812	100nF 20% 50V 0603
2HGV	2238 586 59812	100nF 20% 50V 0603
2HGW	2238 586 59812	100nF 20% 50V 0603
2HGY	2238 586 59812	100nF 20% 50V 0603
2HGZ	2238 586 59812	100nF 20% 50V 0603
2HH0	2238 586 59812	100nF 20% 50V 0603
2HH1	2238 586 59812	100nF 20% 50V 0603
2HH2	2020 552 00235	22µF 20% 6.3V 0805
2HH3	2238 586 59812	100nF 20% 50V 0603
2HH4	2238 586 59812	100nF 20% 50V 0603
2HH5	2238 586 59812	100nF 20% 50V 0603
2HH6	2238 586 59812	100nF 20% 50V 0603
2HH7	2238 586 59812	100nF 20% 50V 0603
2HH8	2238 586 59812	100nF 20% 50V 0603
2HH9	2238 586 59812	100nF 20% 50V 0603
2HHA	2238 586 59812	100nF 20% 50V 0603
2HHM	2222 780 15663	1µF 10% 0805
2HHP	2222 780 15663	1µF 10% 0805
2HK0	4822 124 81058	47µF 20% 4V
2HK1	2238 586 59812	100nF 20% 50V 0603
2HK2	2238 586 59812	100nF 20% 50V 0603
2HK3	4822 124 81058	47µF 20% 4V
2HK4	2238 586 59812	100nF 20% 50V 0603
2HK5	2238 586 59812	100nF 20% 50V 0603
2HK6	2238 586 59812	100nF 20% 50V 0603
2HK7	2222 780 15663	1µF 10% 0805
2HK8	2238 586 59812	100nF 20% 50V 0603
2HK9	4822 124 81058	47µF 20% 4V
2HKA	2020 004 00003	330µF 20% 6.3V
2HKB	2020 552 00291	10µF 20% 6V3 0603
2HKL	2020 552 00217	270pF 5% 50V 0402
2HM3	3198 035 03320	3.3nF 5% 50V 0402
2HM8	3198 035 03320	3.3nF 5% 50V 0402
2HMG	2222 780 15663	1µF 10% 0805
2HMH	2222 780 15663	1µF 10% 0805
2HMJ	2238 586 59812	100nF 20% 50V 0603
2HMN	2238 586 59812	100nF 20% 50V 0603
2HMP	3198 034 03390	33pF 50V 0402
2HMT	3198 034 03390	33pF 50V 0402
2HMW	3198 034 03390	33pF 50V 0402
2HMY	3198 035 03320	3.3nF 5% 50V 0402
2HMZ	3198 034 03390	33pF 50V 0402
2HN1	3198 035 03320	3.3nF 5% 50V 0402
2HP1	2238 869 15101	100pF 5% 50V 0402
2HP4	2020 552 00291	10µF 20% 6V3 0603
2HP5	2238 586 59812	100nF 20% 50V 0603
2HP6	2238 586 59812	100nF 20% 50V 0603
2HP7	2238 586 59812	100nF 20% 50V 0603
2HP8	2238 586 59812	100nF 20% 50V 0603
2HPA	2020 552 00291	10µF 20% 6V3 0603
2HPB	2020 552 96628	10nF 10% 16V 0402
2HR1	2222 780 15663	1µF 10% 0805
2HR3	2222 780 15663	1µF 10% 0805
2HR5	2222 780 15663	1µF 10% 0805
2HR7	2222 780 15663	1µF 10% 0805
2HR9	2222 780 15663	1µF 10% 0805
2HRB	2222 780 15663	1µF 10% 0805
2HRD	2222 780 15663	1µF 10% 0805
2HRF	2222 780 15663	1µF 10% 0805
2HRH	2222 780 15663	1µF 10% 0805
2HRK	2222 780 15663	1µF 10% 0805
2HRM	2238 586 59812	100nF 20% 50V 0603
2HRN	2238 586 59812	100nF 20% 50V 0603
2HRP	2020 552 00291	10µF 20% 6V3 0603
2HRS	3198 035 03320	3.3nF 5% 50V 0402
2HRT	3198 035 03320	3.3nF 5% 50V 0402
2HRU	2238 586 59812	100nF 20% 50V 0603
2HRV	2238 586 59812	100nF 20% 50V 0603
2HRW	2238 586 59812	100nF 20% 50V 0603
2HRY	2020 552 00291	10µF 20% 6V3 0603
2HRZ	2238 787 15641	22nF 5% 16V 0402
2HS0	2238 787 15641	22nF 5% 16V 0402
2HS1	2238 787 15641	22nF 5% 16V 0402
2HS2	2238 869 15101	100pF 5% 50V 0402
2HS3	2238 869 15101	100pF 5% 50V 0402
2HS4	2238 787 15641	22nF 5% 16V 0402
2HS5	3198 035 03310	330pF 5% 50V 0402
2HS6	3198 035 03310	330pF 5% 50V 0402
2HS7	2238 787 15641	22nF 5% 16V 0402
2HS8	2238 869 15101	100pF 5% 50V 0402
2HS9	2238 869 15101	100pF 5% 50V 0402
2HSA	2238 787 15641	22nF 5% 16V 0402
2HSB	2238 787 15641	22nF 5% 16V 0402
2HSC	2238 787 15641	22nF 5% 16V 0402
2HSD	2238 869 15101	100pF 5% 50V 0402
2HSE	2238 869 15101	100pF 5% 50V 0402
2HSF	2238 787 15641	22nF 5% 16V 0402
2HSG	3198 035 03310	330pF 5% 50V 0402
2HSH	3198 035 03310	330pF 5% 50V 0402
2HSJ	2238 787 15641	22nF 5% 16V 0402
2HSK	2238 869 15101	100pF 5% 50V 0402
2HSM	2238 869 15101	100pF 5% 50V 0402
2HSN	2238 787 15641	22nF 5% 16V 0402
2HSP	2238 787 15641	22nF 5% 16V 0402
2HSR	2238 586 59812	100nF 20% 50V 0603
2HSS	2238 586 59812	100nF 20% 50V 0603
2HST	2238 787 15641	22nF 5% 16V 0402
2HSU	3198 034 01290	12pF 1% 50V 0402
2HSV	2238 787 15641	22nF 5% 16V 0402
2HSW	2238 787 15641	22nF 5% 16V 0402
2HSY	2238 787 15641	22nF 5% 16V 0402
2HSZ	2238 586 59812	100nF 20% 50V 0603
2HT0	2238 787 15641	22nF 5% 16V 0402
2HT1	4822 124 23002	10µF 16V
2HT2	2238 586 59812	100nF 20% 50V 0603
2HT3	2238 787 15641	22nF 5% 16V 0402
2HT4	4822 124 23002	10µF 16V
2HT5	2238 787 15641	22nF 5% 16V 0402
2HT6	2238 787 15641	22nF 5% 16V 0402
2HT7	2238 787 15641	22nF 5% 16V 0402
2HT8	2238 787 15641	22nF 5% 16V 0402
2HT9	3198 034 01510	150pF 1% 50V 0402
2HTA	2238 869 15829	82pF 5% 50V 0402
2HTB	2238 787 15641	22nF 5% 16V 0402
2HTE	2238 787 15641	22nF 5% 16V 0402
2HTH	2238 787 15641	22nF 5% 16V 0402
2HTK	2238 787 15641	22nF 5% 16V 0402
2HTP	2238 869 15101	100pF 5% 50V 0402
2HTR	2238 869 15101	100pF 5% 50V 0402
2HTS	3198 035 03310	330pF 5% 50V 0402
2HTT	3198 035 03310	330pF 5% 50V 0402
2HTU	2238 869 15101	100pF 5% 50V 0402
2HTV	2238 869 15101	100pF 5% 50V 0402
2HU1	3198 034 01510	150pF 1% 50V 0402
2HU2	2238 869 15829	82pF 5% 50V 0402
2HU5	2238 787 15641	22nF 5% 16V 0402
2HU8	2238 787 15641	22nF 5% 16V 0402
2HUB	2238 787 15641	22nF 5% 16V 0402
2HUC	3198 035 03310	330pF 5% 50V 0402
2HUD	3198 035 03310	330pF 5% 50V 0402
2HUK	2020 552 00217	270pF 5% 50V 0402
2HUN	2238 787 15641	22nF 5% 16V 0402
2HUP	2238 787 15641	22nF 5% 16V 0402
2HV2	2020 552 96618	1nF 10% 50V 0402
2HV3	2020 552 00291	10µF 20% 6V3 0603
2HV4	2020 552 96618	1nF 10% 50V 0402
2HV6	3198 035 03320	3.3nF 5% 50V 0402
2HV7	2238 586 59812	100nF 20% 50V 0603
2HV9	2020 552 00291	10µF 20% 6V3 0603
2HVA	3198 035 03320	3.3nF 5% 50V 0402
2HVB	2020 552 00291	10µF 20% 6V3 0603
2HVC	2238 586 59812	100nF 20% 50V 0603
2HVD	2222 780 15663	1µF 10% 0805
2HVE	2222 780 15663	1µF 10% 0805
2HVG	2020 552 96618	1nF 10% 50V 0402
2HY0	2238 586 59812	100nF 20% 50V 0603
2HY1	2238 586 59812	100nF 20% 50V 0603
2HY2	2238 586 59812	100nF 20% 50V 0603
2HY3	2022 552 05679	1µF 10% 16V 0805
2HY4	2238 586 59812	100nF 20% 50V 0603
2HY5	2222 780 15663	1µF 10% 0805
2HY6	2238 586 59812	100nF 20% 50V 0603
2HY7	2222 780 15663	1µF 10% 0805
2HY8	2238 586 59812	100nF 20% 50V 0603
2HY9	2222 780 15663	1µF 10% 0805
2HYA	2238 586 59812	100nF 20% 50V 0603
2HYB	2222 780 15663	1µF 10% 0805
2HYC	2020 552 00291	10µF 20% 6V3 0603
2HYD	2020 552 00291	10µF 20% 6V3 0603
2HYE	2020 552 00291	10µF 20% 6V3 0603
2HYF	2020 552 00291	10µF 20% 6V3 0603
2HYG	2238 586 59812	100nF 20% 50V 0603
2HYH	2238 586 59812	100nF 20% 50V 0603
2HYJ	2238 586 59812	100nF 20% 50V 0603
2HYK	2238 586 59812	100nF 20% 50V 0603
2HYM	2238 586 59812	100nF 20% 50V 0603
2HYN	2238 586 59812	100nF 20% 50V 0603
2HYP	2238 586 59812	100nF 20% 50V 0603
2HYR	2238 586 59812	100nF 20% 50V 0603
2HYS	2222 780 15663	1µF 10% 0805
2HYT	2222 780 15663	1µF 10% 0805
2HYU	2222 780 15663	1µF 10% 0805
2HYV	2222 780 15663	1µF 10% 0805
2HYW	2238 586 59812	100nF 20% 50V 0603
2HYY	2238 586 59812	100nF 20% 50V 0603
2HYZ	2238 586 59812	100nF 20% 50V 0603
2HZ0	2238 586 59812	100nF 20% 50V 0603
2HZ1	2238 586 59812	100nF 20% 50V 0603
2HZ2	2222 780 15663	1µF 10% 0805
2HZ3	2238 586 59812	100nF 20% 50V 0603
2HZ4	2238 586 59812	100nF 20% 50V 0603
2HZ7	2222 780 15663	1µF 10% 0805
2HZ8	2238 586 59812	100nF 20% 50V 0603
2HZ9	2238 586 59812	100nF 20% 50V 0603
2HZA	2238 586 59812	100nF 20% 50V 0603
2HZB	2222 780 15663	1µF 10% 0805
2HZC	2222 780 15663	1µF 10% 0805
2HZD	5322 126 11583	10nF 10% 50V 0603
2HZE	5322 126 11583	10nF 10% 50V 0603
2HZF	5322 126 11583	10nF 10% 50V 0603
2HZG	5322 126 11583	10nF 10% 50V 0603
2HZH	2238 586 59812	100nF 20% 50V 0603
2HZJ	2222 780 15663	1µF 10% 0805
2HZN	2238 586 59812	100nF 20% 50V 0603
2HZP	2238 586 59812	100nF 20% 50V 0603
2HZR	2238 586 59812	100nF 20% 50V 0603
2HZS	2238 586 59812	100nF 20% 50V 0603
2HZT	2222 780 15663	1µF 10% 0805
2HZU	2222 780 15663	1µF 10% 0805
2HZV	2238 586 59812	100nF 20% 50V 0603
2J11	2238 869 15101	100pF 5% 50V 0402
2J12	2238 869 15101	100pF 5% 50V 0402
2J15	2238 869 15101	100pF 5% 50V 0402

2J16	2238 869 15101	100pF 5% 50V 0402
2J20	2238 869 15101	100pF 5% 50V 0402
2J30	2020 552 96618	1nF 10% 50V 0402
2J31	2238 586 59812	100nF 20% 50V 0603
2J32	2020 552 00291	10µF 20% 6V3 0603
2J33	2238 586 59812	100nF 20% 50V 0603
2J34	2238 586 59812	100nF 20% 50V 0603
2J42	4822 126 14519	22pF 5% 50V 0402
2J49	4822 126 14519	22pF 5% 50V 0402
2J61	2222 780 15663	1µF 10% 0805
2J62	2238 869 15101	100pF 5% 50V 0402
2J65	2222 780 15663	1µF 10% 0805
2J66	2238 869 15101	100pF 5% 50V 0402
2JA0	2238 586 59812	100nF 20% 50V 0603
2JA1	2238 586 59812	100nF 20% 50V 0603
2JA2	2238 586 59812	100nF 20% 50V 0603
2JA3	2238 586 59812	100nF 20% 50V 0603
2JA4	2020 552 96628	10nF 10% 16V 0402
2JA5	2020 552 96628	10nF 10% 16V 0402
2JA6	3198 035 14720	4.7nF 5% 25V 0402
2JA7	3198 035 14720	4.7nF 5% 25V 0402
2JA8	2250 200 13676	10µF 10% 6V3 0805
2JA9	2238 586 59812	100nF 20% 50V 0603
2JB0	2020 552 96618	1nF 10% 50V 0402
2JB1	2250 200 13676	10µF 10% 6V3 0805
2JB2	2238 586 59812	100nF 20% 50V 0603
2JB3	2238 586 59812	100nF 20% 50V 0603
2JB4	2238 586 59812	100nF 20% 50V 0603
2JB5	2238 586 59812	100nF 20% 50V 0603
2JB6	2020 552 96618	1nF 10% 50V 0402
2JB7	2020 552 96618	1nF 10% 50V 0402
2JB8	2020 552 96618	1nF 10% 50V 0402
2JB9	2020 552 96618	1nF 10% 50V 0402
2JC0	2238 586 59812	100nF 20% 50V 0603
2JC1	2020 552 96618	1nF 10% 50V 0402
2JE1	2238 586 59812	100nF 20% 50V 0603
2JE2	2238 586 59812	100nF 20% 50V 0603
2JE3	2238 586 59812	100nF 20% 50V 0603
2JE4	2238 586 59812	100nF 20% 50V 0603
2JE5	2238 586 59812	100nF 20% 50V 0603
2JE6	2238 586 59812	100nF 20% 50V 0603
2JE7	2020 552 96618	1nF 10% 50V 0402
2JE8	2238 586 59812	100nF 20% 50V 0603
2JE9	2238 586 59812	100nF 20% 50V 0603
2JF0	2020 552 96618	1nF 10% 50V 0402
2JF1	2020 552 96618	1nF 10% 50V 0402
2JG1	2238 586 59812	100nF 20% 50V 0603
2JG2	2238 586 59812	100nF 20% 50V 0603
2JG3	3198 035 14720	4.7nF 5% 25V 0402
2N04	2238 586 59812	100nF 20% 50V 0603
2N05	2238 586 59812	100nF 20% 50V 0603
2N06	2238 586 59812	100nF 20% 50V 0603
2N07	2238 586 59812	100nF 20% 50V 0603
2N08	2238 586 59812	100nF 20% 50V 0603
2N09	2238 586 59812	100nF 20% 50V 0603
2N10	2238 586 59812	100nF 20% 50V 0603
2N11	2238 586 59812	100nF 20% 50V 0603
2N12	2238 586 59812	100nF 20% 50V 0603
2N13	2238 586 59812	100nF 20% 50V 0603
2N14	2238 586 59812	100nF 20% 50V 0603
2N15	2238 586 59812	100nF 20% 50V 0603
2N16	2238 586 59812	100nF 20% 50V 0603
2N17	2238 586 59812	100nF 20% 50V 0603
2N18	2238 586 59812	100nF 20% 50V 0603
2N19	4822 124 11946	22µF 20% 16V
2N20	4822 124 11946	22µF 20% 16V
2N21	2238 586 59812	100nF 20% 50V 0603
2N22	3198 034 02790	47pF 1% 50V 0402
2N23	3198 034 02790	47pF 1% 50V 0402
2N25	2022 552 05888	100nF 10% 16V
2N30	2238 586 59812	100nF 20% 50V 0603
2N31	2020 021 00215	220µF 20% 25V
2N32	4822 124 11131	47µF 6.3V
2N51	2238 869 15101	100pF 5% 50V 0402
2N52	2238 869 15101	100pF 5% 50V 0402
2N53	2238 869 15101	100pF 5% 50V 0402
2N54	2238 869 15101	100pF 5% 50V 0402
2N55	2238 869 15101	100pF 5% 50V 0402
2N56	2238 869 15101	100pF 5% 50V 0402
2T03	3198 034 08280	8.2pF 50V
2T04	3198 034 08280	8.2pF 50V
2T05	2020 552 96628	10nF 10% 16V 0402
2T06	2238 787 15641	22nF 5% 16V 0402
2T07	2020 552 96628	10nF 10% 16V 0402
2T08	2020 552 96628	10nF 10% 16V 0402
2T09	2020 552 96628	10nF 10% 16V 0402
2T10	2020 552 96628	10nF 10% 16V 0402
2T11	2020 552 96628	10nF 10% 16V 0402
2T12	2238 586 59812	100nF 20% 50V 0603
2T13	2238 586 59812	100nF 20% 50V 0603
2T14	2238 586 59812	100nF 20% 50V 0603
2T15	2238 586 59812	100nF 20% 50V 0603
2T16	2238 586 59812	100nF 20% 50V 0603
2T17	2238 586 59812	100nF 20% 50V 0603
2T18	2238 586 59812	100nF 20% 50V 0603
2T19	2238 586 59812	100nF 20% 50V 0603
2T20	2238 586 59812	100nF 20% 50V 0603
2T21	2238 586 59812	100nF 20% 50V 0603
2T22	2238 586 59812	100nF 20% 50V 0603
2T23	2238 586 59812	100nF 20% 50V 0603
2T24	2238 586 59812	100nF 20% 50V 0603
2T25	2238 586 59812	100nF 20% 50V 0603
2T26	2238 586 59812	100nF 20% 50V 0603
2T27	3198 034 01590	15pF 1% 50V 0402
2T28	3198 034 01590	15pF 1% 50V 0402
2T29	2238 586 59812	100nF 20% 50V 0603
2T30	2020 552 96628	10nF 10% 16V 0402
2T31	3198 034 03380	3.3pF 1% 50V 0402
2T32	2238 586 59812	100nF 20% 50V 0603
2T33	2238 586 59812	100nF 20% 50V 0603
2T34	2020 552 00152	1µF 10% 6.3V 0402
2T35	2020 552 96628	10nF 10% 16V 0402
2T36	2020 552 96628	10nF 10% 16V 0402
2T37	2238 586 59812	100nF 20% 50V 0603
2T51	2020 552 96628	10nF 10% 16V 0402
2T53	2020 552 96628	10nF 10% 16V 0402
2T59	3198 034 01510	150pF 1% 50V 0402
2T61	2238 586 59812	100nF 20% 50V 0603
2T62	2238 586 59812	100nF 20% 50V 0603
2T63	2238 586 59812	100nF 20% 50V 0603
2T64	2020 552 00235	22µF 20% 6.3V 0805
2T75	2020 552 96628	10nF 10% 16V 0402
2T80	2020 552 96326	220nF 10% 16V
2T81	3198 034 04790	27pF 1% 50V 0402
2T82	2020 552 96623	2.2nF 10% 50V 0402
2T83	3198 035 14720	4.7nF 5% 25V 0402
2T84	2020 552 96628	10nF 10% 16V 0402
2T85	2020 552 96628	10nF 10% 16V 0402
2T86	3198 034 03380	3.3pF 1% 50V 0402
2T87	3198 034 03380	3.3pF 1% 50V 0402
2T88	2020 552 96628	10nF 10% 16V 0402
2T89	2020 552 96628	10nF 10% 16V 0402
2T90	2020 552 96628	10nF 10% 16V 0402
2T92	2020 552 96621	1.5nF 10% 50V 0402
2T97	2238 586 59812	100nF 20% 50V 0603
2T99	4822 124 12095	100µF 20% 16V
2TA1	2020 552 96628	10nF 10% 16V 0402
2TA2	4822 126 14519	22pF 5% 50V 0402
2TA3	2238 869 15101	100pF 5% 50V 0402
2TA4	2238 586 59812	100nF 20% 50V 0603
2TA5	2020 552 00235	22µF 20% 6.3V 0805
2TB2	3198 034 01510	150pF 1% 50V 0402
2TB5	2020 552 96628	10nF 10% 16V 0402
2TB6	2020 552 96628	10nF 10% 16V 0402
2U00	2238 586 59812	100nF 20% 50V 0603
2U03	2020 552 00211	22µF 10% 16V 1210
2U04	3198 035 03320	3.3nF 5% 50V 0402
2U05	2222 780 15663	1µF 10% 0805
2U06	2222 780 15663	1µF 10% 0805
2U07	2238 586 59812	100nF 20% 50V 0603
2U08	3198 035 03320	3.3nF 5% 50V 0402
2U11	2222 780 15663	1µF 10% 0805
2U12	2238 586 59812	100nF 20% 50V 0603
2U13	2020 552 96618	1nF 10% 50V 0402
2U14	2238 586 59812	100nF 20% 50V 0603
2U15	3198 035 03320	3.3nF 5% 50V 0402
2U16	2020 552 96618	1nF 10% 50V 0402
2U17	2238 586 59812	100nF 20% 50V 0603
2U18	2238 586 59812	100nF 20% 50V 0603
2U19	2238 586 59812	100nF 20% 50V 0603
2U20	2238 586 59812	100nF 20% 50V 0603
2U21	2020 552 96738	47µF 6.3V
2U23	2238 586 59812	100nF 20% 50V 0603
2U24	3198 035 03320	3.3nF 5% 50V 0402
2U25	2238 787 15641	22nF 5% 16V 0402
2U26	2238 586 59812	100nF 20% 50V 0603
2U27	2020 552 96618	1nF 10% 50V 0402
2U28	2020 552 96618	1nF 10% 50V 0402
2U29	2222 780 15663	1µF 10% 0805
2U32	2020 552 00152	1µF 10% 6.3V 0402
2U34	2238 869 15101	100pF 5% 50V 0402
2U36	2238 869 15101	100pF 5% 50V 0402
2U37	2238 586 59812	100nF 20% 50V 0603
2U38	2020 552 00152	1µF 10% 6.3V 0402
2U39	2020 552 00152	1µF 10% 6.3V 0402
2U40	2020 552 00152	1µF 10% 6.3V 0402
2U41	4822 124 12108	100µF 20% 4V
2U42	4822 124 12108	100µF 20% 4V
2U43	2020 552 00152	1µF 10% 6.3V 0402
2U44	2020 552 00152	1µF 10% 6.3V 0402
2U45	2238 586 59812	100nF 20% 50V 0603
2U46	2238 586 59812	100nF 20% 50V 0603
2U47	5322 124 41945	22µF 20% 35V
2U48	5322 124 41945	22µF 20% 35V
2U49	2020 552 96618	1nF 10% 50V 0402
2U50	2020 552 00152	1µF 10% 6.3V 0402
2U51	2020 552 96618	1nF 10% 50V 0402
2U52	2020 552 00152	1µF 10% 6.3V 0402
2U93	2020 552 00211	22µF 10% 16V 1210
2U94	2020 552 96738	47µF 6.3V

–WW–

3B20	4822 117 13545	100Ω 1% 0402
3B21	4822 117 13545	100Ω 1% 0402
3B22	4822 117 13545	100Ω 1% 0402
3B23	4822 117 13545	100Ω 1% 0402
3B26	4822 117 13545	100Ω 1% 0402
3B29	4822 117 13546	47Ω 5% 0402
3B30	4822 117 13548	1kΩ 5% 0402
3B31	4822 117 13548	1kΩ 5% 0402
3B32	4822 117 13548	1kΩ 5% 0402
3B33	4822 117 13548	1kΩ 5% 0402
3B34	2120 108 00347	2.2MΩ 5% 1206
3B35	3198 031 01590	15Ω 5% 0402
3B36	4822 117 13543	470Ω 5% 0402
3B37	4822 117 13548	1kΩ 5% 0402
3B38	3198 031 03910	390Ω 1% 0402
3B39	3198 031 03910	390Ω 1% 0402
3B40	3198 031 03910	390Ω 1% 0402
3B41	3198 031 03910	390Ω 1% 0402
3B42	3198 031 03910	390Ω 1% 0402
3B43	4822 117 11297	100kΩ 5% 0.1W
3B44	3198 031 04720	4.7kΩ 5% 0402
3B45	3198 031 03320	3.3kΩ 5% 0402
3B46	4822 117 13548	1kΩ 5% 0402
3B47	4822 117 13543	470Ω 5% 0402
3B48	4822 117 13606	10kΩ 5% 0.01W 0402
3B49	2322 706 71809	18Ω 1% 0402
3B50	2322 706 76809	68Ω 1% 0402 RC32
3B51	4822 053 10108	1Ω 5% 1W
3B54	2322 706 73301	330Ω 1% 0402
3B55	3198 031 01220	1.2kΩ 5% 0.01W 0402
3B58	4822 117 13545	100Ω 1% 0402
3B59	4822 117 13545	100Ω 1% 0402
3B60	2120 108 00347	2.2MΩ 5% 1206
3B61	4822 117 13548	1kΩ 5% 0402
3B62	4822 117 13606	10kΩ 5% 0.01W 0402
3B63	4822 117 13601	22kΩ 5% 0402
3B64	3198 031 01530	15kΩ 5% 0.01W 0402
3B65	4822 117 13606	10kΩ 5% 0.01W 0402
3B66	3198 031 04720	4.7kΩ 5% 0402
3B67	4822 117 13548	1kΩ 5% 0402
3B68	4822 117 13548	1kΩ 5% 0402
3B69	4822 117 13548	1kΩ 5% 0402
3B70	4822 117 13548	1kΩ 5% 0402
3B71	4822 116 83872	220Ω 5% 0.5W
3B72	4822 117 13602	2.2kΩ 5% 0.01W 0402
3B73	2322 706 71002	1kΩ 1% 0402
3B74	2322 706 71002	1kΩ 1% 0402
3B75	4822 117 13548	1kΩ 5% 0402
3B76	4822 117 13548	1kΩ 5% 0402
3B77	4822 117 13548	1kΩ 5% 0402
3B78	4822 117 13548	1kΩ 5% 0402
3D00	2322 762 60332	3.3kΩ 5% 2512
3D01	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D03	2350 033 11223	22kΩ 5%
3D04	5322 117 11726	10Ω 5%
3D05	4822 117 13606	10kΩ 5% 0.01W 0402
3D06	4822 117 13601	22kΩ 5% 0402
3D07	3198 031 01830	18kΩ 5% 0.01W 0402
3D09	3198 031 04780	4.7Ω 5% 0402
3D10	2322 762 60332	3.3kΩ 5% 2512
3D11	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D13	2350 033 11223	22kΩ 5%
3D14	2350 033 11223	22kΩ 5%
3D15	3198 031 01050	1MΩ 5% 0402
3D16	2322 762 60331	330Ω 5% 2512
3D17	3198 031 04780	4.7Ω 5% 0402
3D18	4822 117 13606	10kΩ 5% 0.01W 0402
3D19	4822 117 13601	22kΩ 5% 0402
3D20	3198 031 01830	18kΩ 5% 0.01W 0402
3D21	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D22	3198 031 01050	1MΩ 5% 0402
3D25	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D26	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D27	3198 031 03920	3.9kΩ 5% 0402
3D28	4822 117 11297	100kΩ 5% 0.1W
3D29	3198 031 03920	3.9kΩ 5% 0402
3D30	4822 117 11297	100kΩ 5% 0.1W
3D31	4822 117 13606	10kΩ 5% 0.01W 0402
3D32	4822 117 13606	10kΩ 5% 0.01W 0402
3D35	2322 762 60331	330Ω 5% 2512
3D37	3198 031 05610	560Ω 5% 0.01W 0402
3D38	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D39	5322 117 11726	10Ω 5%
3D40	3198 031 05610	560Ω 5% 0.01W 0402
3D55	2350 033 11223	22kΩ 5%
3D58	3198 031 04730	47Ω 5% 0402
3D61	2350 033 11223	22kΩ 5%
3D62	3198 031 01220	1.2kΩ 5% 0.01W 0402

3D63	3198 031 02240	220kΩ 5% 0.1W 0402
3D64	3198 031 04720	4.7kΩ 5% 0402
3D71	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D73	3198 031 04720	4.7kΩ 5% 0402
3D74	4822 117 13603	33kΩ 5% 0402
3D75	3198 031 06830	68kΩ 5% 0.01W 0402
3D76	2350 033 11223	22kΩ 5%
3D78	3198 031 04730	47Ω 5% 0402
3D79	4822 117 11297	100kΩ 5% 0.1W
3D80	4822 117 11297	100kΩ 5% 0.1W
3D83	3198 031 04720	4.7kΩ 5% 0402
3D89	4822 117 11297	100kΩ 5% 0.1W
3D90	2350 033 11223	22kΩ 5%
3E44	4822 117 13605	Jumper 0402
3E47	4822 117 13545	100Ω 1% 0402
3E48	4822 117 11297	100kΩ 5% 0.1W
3E52	4822 117 13545	100Ω 1% 0402
3E53	4822 117 11297	100kΩ 5% 0.1W
3E54	4822 117 13545	100Ω 1% 0402
3E55	4822 117 13605	Jumper 0402
3E56	4822 117 11297	100kΩ 5% 0.1W
3E58	4822 117 13545	100Ω 1% 0402
3E60	4822 117 13605	Jumper 0402
3E61	4822 117 11297	100kΩ 5% 0.1W
3E63	4822 117 11297	100kΩ 5% 0.1W
3E64	4822 117 11297	100kΩ 5% 0.1W
3E65	4822 117 13545	100Ω 1% 0402
3E66	4822 117 13545	100Ω 1% 0402
3E92	4822 117 13545	100Ω 1% 0402
3E93	4822 117 13545	100Ω 1% 0402
3F35	3198 031 02710	270Ω 5% 0.1W 0402
3F37	3198 031 02710	270Ω 5% 0.1W 0402
3F38	3198 031 02710	270Ω 5% 0.1W 0402
3F40	3198 031 02710	270Ω 5% 0.1W 0402
3F41	3198 031 02710	270Ω 5% 0.1W 0402
3F43	3198 031 02710	270Ω 5% 0.1W 0402
3F44	3198 031 02710	270Ω 5% 0.1W 0402
3F46	3198 031 02710	270Ω 5% 0.1W 0402
3F47	3198 031 02710	270Ω 5% 0.1W 0402
3F49	3198 031 02710	270Ω 5% 0.1W 0402
3F50	3198 031 02710	270Ω 5% 0.1W 0402
3F52	3198 031 02710	270Ω 5% 0.1W 0402
3F53	3198 031 02710	270Ω 5% 0.1W 0402
3F55	3198 031 02710	270Ω 5% 0.1W 0402
3F56	3198 031 02710	270Ω 5% 0.1W 0402
3F58	3198 031 02710	270Ω 5% 0.1W 0402
3F59	3198 031 02710	270Ω 5% 0.1W 0402
3F61	3198 031 02710	270Ω 5% 0.1W 0402
3F62	3198 031 02710	270Ω 5% 0.1W 0402
3F64	3198 031 02710	270Ω 5% 0.1W 0402
3F65	3198 031 02710	270Ω 5% 0.1W 0402
3F67	3198 031 02710	270Ω 5% 0.1W 0402
3F68	3198 031 02710	270Ω 5% 0.1W 0402
3F70	3198 031 02710	270Ω 5% 0.1W 0402
3F75	4822 117 13546	47Ω 5% 0402
3F76	4822 117 13606	10kΩ 5% 0.01W 0402
3F93	4822 117 13546	47Ω 5% 0402
3F94	4822 117 13546	47Ω 5% 0402
3F95	4822 117 13545	100Ω 1% 0402
3F98	4822 117 13545	100Ω 1% 0402
3FA0	3198 031 03320	3.3kΩ 5% 0402
3FA1	4822 117 13606	10kΩ 5% 0.01W 0402
3FA2	4822 117 11297	100kΩ 5% 0.1W
3FA4	4822 117 13548	1kΩ 5% 0402
3FA5	4822 117 13548	1kΩ 5% 0402
3FA6	4822 117 13545	100Ω 1% 0402
3FA7	4822 117 13545	100Ω 1% 0402
3FA8	4822 117 13545	100Ω 1% 0402
3FB2	4822 117 13606	10kΩ 5% 0.01W 0402
3FB4	4822 117 13597	330Ω 5% 0.01W 0402
3FB6	4822 117 13597	330Ω 5% 0.01W 0402
3FB8	4822 117 13545	100Ω 1% 0402
3FB9	4822 117 13548	1kΩ 5% 0402
3FC1	4822 117 13597	330Ω 5% 0.01W 0402
3FC3	4822 117 13597	330Ω 5% 0.01W 0402
3FC5	4822 117 13597	330Ω 5% 0.01W 0402
3FC6	4822 117 11297	100kΩ 5% 0.1W
3G00	4822 117 13545	100Ω 1% 0402
3G01	4822 117 13545	100Ω 1% 0402
3G02	4822 117 13545	100Ω 1% 0402
3G03	4822 117 13545	100Ω 1% 0402
3G04	4822 117 13545	100Ω 1% 0402
3G05	4822 117 13545	100Ω 1% 0402
3G06	4822 117 13545	100Ω 1% 0402
3G07	4822 117 13545	100Ω 1% 0402
3G08	4822 117 13545	100Ω 1% 0402
3G09	4822 117 13545	100Ω 1% 0402
3G10	4822 117 13545	100Ω 1% 0402
3G11	4822 117 13545	100Ω 1% 0402
3G52	4822 117 13545	100Ω 1% 0402
3G53	4822 117 13545	100Ω 1% 0402
3G55	3198 031 04730	47Ω 5% 0402
3G56	4822 117 13602	2.2kΩ 5% 0.01W 0402
3G57	3198 031 02730	27kΩ 5% 0402
3G58	3198 031 04720	4.7kΩ 5% 0402
3G59	3198 031 04730	47Ω 5% 0402
3G63	4822 117 13546	47Ω 5% 0402
3G64	3198 031 04730	47Ω 5% 0402
3G65	3198 031 01530	15kΩ 5% 0.01W 0402
3G66	4822 117 13548	1kΩ 5% 0402
3G67	4822 117 13606	10kΩ 5% 0.01W 0402
3G68	4822 117 13606	10kΩ 5% 0.01W 0402
3G69	4822 117 13606	10kΩ 5% 0.01W 0402
3G71	4822 117 13545	100Ω 1% 0402
3G72	3198 031 04720	4.7kΩ 5% 0402
3G73	3198 031 04730	47Ω 5% 0402
3G76	4822 117 13548	1kΩ 5% 0402
3G77	4822 117 13546	47Ω 5% 0402
3G79	4822 117 13606	10kΩ 5% 0.01W 0402
3G86	4822 117 13546	47Ω 5% 0402
3G92	4822 117 13606	10kΩ 5% 0.01W 0402
3G95	3198 031 04720	4.7kΩ 5% 0402
3G96	4822 117 13546	47Ω 5% 0402
3GA0	4822 117 13602	2.2kΩ 5% 0.01W 0402
3GA1	4822 117 13606	10kΩ 5% 0.01W 0402
3GA2	3198 031 04720	4.7kΩ 5% 0402
3GA3	4822 117 13602	2.2kΩ 5% 0.01W 0402
3GA4	4822 117 13606	10kΩ 5% 0.01W 0402
3GA6	3198 031 01230	12kΩ 5% 0402
3GB7	3198 031 04730	47Ω 5% 0402
3GB8	3198 031 01230	12kΩ 5% 0402
3GB9	4822 117 13606	10kΩ 5% 0.01W 0402
3GC0	3198 031 04720	4.7kΩ 5% 0402
3GC2	4822 117 13603	33kΩ 5% 0402
3GC3	4822 117 13548	1kΩ 5% 0402
3GC4	4822 117 13605	Jumper 0402
3GE1	3198 031 04720	4.7kΩ 5% 0402
3GE2	3198 031 04720	4.7kΩ 5% 0402
3GE3	3198 031 01050	1MΩ 5% 0402
3GE4	4822 117 13546	47Ω 5% 0402
3GE5	3198 031 04720	4.7kΩ 5% 0402
3GE6	3198 031 04720	4.7kΩ 5% 0402
3GF0	4822 117 13606	10kΩ 5% 0.01W 0402
3GF1	4822 117 13548	1kΩ 5% 0402
3GF2	3198 031 04720	4.7kΩ 5% 0402
3GF3	4822 117 13545	100Ω 1% 0402
3GF4	3198 031 04720	4.7kΩ 5% 0402
3GF5	4822 117 13545	100Ω 1% 0402
3GF6	3198 031 04720	4.7kΩ 5% 0402
3GF7	4822 117 13545	100Ω 1% 0402
3GF8	4822 117 13545	100Ω 1% 0402
3GF9	4822 117 13545	100Ω 1% 0402
3GG1	3198 031 04720	4.7kΩ 5% 0402
3GG2	4822 117 13545	100Ω 1% 0402
3GG3	4822 117 13545	100Ω 1% 0402
3GH3	4822 117 13548	1kΩ 5% 0402
3H00	4822 117 13606	10kΩ 5% 0.01W 0402
3H01	4822 117 13606	10kΩ 5% 0.01W 0402
3H02	3198 031 04720	4.7kΩ 5% 0402
3H03	3198 031 04720	4.7kΩ 5% 0402
3H04	4822 117 13606	10kΩ 5% 0.01W 0402
3H05	4822 117 13606	10kΩ 5% 0.01W 0402
3H06	4822 117 13606	10kΩ 5% 0.01W 0402
3H07	4822 117 13606	10kΩ 5% 0.01W 0402
3H08	4822 117 13606	10kΩ 5% 0.01W 0402
3H09	4822 117 13606	10kΩ 5% 0.01W 0402
3H10	4822 117 13606	10kΩ 5% 0.01W 0402
3H11	4822 117 13545	100Ω 1% 0402
3H12	4822 117 13606	10kΩ 5% 0.01W 0402
3H13	3198 031 04720	4.7kΩ 5% 0402
3H14	4822 117 13606	10kΩ 5% 0.01W 0402
3H15	4822 117 13606	10kΩ 5% 0.01W 0402
3H16	4822 117 13606	10kΩ 5% 0.01W 0402
3H17	4822 117 13606	10kΩ 5% 0.01W 0402
3H19	3198 031 04720	4.7kΩ 5% 0402
3H20	3198 031 04720	4.7kΩ 5% 0402
3H21	4822 117 13606	10kΩ 5% 0.01W 0402
3H23	4822 117 13606	10kΩ 5% 0.01W 0402
3H24	4822 117 13606	10kΩ 5% 0.01W 0402
3H26	4822 117 13606	10kΩ 5% 0.01W 0402
3H27	4822 117 13606	10kΩ 5% 0.01W 0402
3H28	4822 117 13606	10kΩ 5% 0.01W 0402
3H30	4822 117 13606	10kΩ 5% 0.01W 0402
3H31	4822 117 13606	10kΩ 5% 0.01W 0402
3H32	4822 117 13606	10kΩ 5% 0.01W 0402
3H35	4822 117 13545	100Ω 1% 0402
3H36	4822 117 13606	10kΩ 5% 0.01W 0402
3H38	4822 117 13545	100Ω 1% 0402
3H39	4822 117 13606	10kΩ 5% 0.01W 0402
3H40	4822 117 13545	100Ω 1% 0402
3H41	4822 117 13545	100Ω 1% 0402
3H42	4822 117 13606	10kΩ 5% 0.01W 0402
3H43	4822 117 13545	100Ω 1% 0402
3H44	4822 117 13545	100Ω 1% 0402
3H46	3198 031 02730	27kΩ 5% 0402
3H47	4822 117 13605	Jumper 0402
3H48	4822 117 13606	10kΩ 5% 0.01W 0402
3H49	4822 117 13545	100Ω 1% 0402
3H50	4822 117 13545	100Ω 1% 0402
3H51	4822 117 13606	10kΩ 5% 0.01W 0402
3H52	4822 117 13545	100Ω 1% 0402
3H53	4822 117 13545	100Ω 1% 0402
3H54	4822 117 13545	100Ω 1% 0402
3H56	4822 117 13545	100Ω 1% 0402
3H57	4822 117 13545	100Ω 1% 0402
3H58	4822 117 13606	10kΩ 5% 0.01W 0402
3H59	4822 117 13545	100Ω 1% 0402
3H60	4822 117 13606	10kΩ 5% 0.01W 0402
3H61	4822 117 13545	100Ω 1% 0402
3H63	4822 117 13545	100Ω 1% 0402
3H64	4822 117 13606	10kΩ 5% 0.01W 0402
3H65	4822 117 13545	100Ω 1% 0402
3H66	4822 117 13545	100Ω 1% 0402
3H67	4822 117 13606	10kΩ 5% 0.01W 0402
3H68	4822 117 13545	100Ω 1% 0402
3H69	4822 117 13606	10kΩ 5% 0.01W 0402
3H70	3198 031 06810	680Ω 5% 0.01W 0402
3H71	4822 117 13545	100Ω 1% 0402
3H72	4822 117 13545	100Ω 1% 0402
3H73	4822 117 13545	100Ω 1% 0402
3H74	4822 117 13545	100Ω 1% 0402
3H77	4822 117 11297	100kΩ 5% 0.1W
3H78	3198 031 01090	10Ω 5% 0.01W 0402
3H79	3198 031 06830	68kΩ 5% 0.01W 0402
3H80	4822 117 11297	100kΩ 5% 0.1W
3H81	3198 031 06830	68kΩ 5% 0.01W 0402
3H82	4822 117 13601	22kΩ 5% 0402
3H83	4822 117 11297	100kΩ 5% 0.1W
3H84	4822 117 13606	10kΩ 5% 0.01W 0402
3H85	4822 117 11297	100kΩ 5% 0.1W
3H86	3198 031 04720	4.7kΩ 5% 0402
3H87	3198 031 06830	68kΩ 5% 0.01W 0402
3H88	4822 117 13548	1kΩ 5% 0402
3H89	3198 031 04730	47Ω 5% 0402
3H90	3198 031 02730	27kΩ 5% 0402
3H91	4822 117 13601	22kΩ 5% 0402
3H92	2322 705 70184	180Ω 5% 0402
3H93	4822 117 13606	10kΩ 5% 0.01W 0402
3H95	4822 117 13606	10kΩ 5% 0.01W 0402
3HA0	4822 117 13606	10kΩ 5% 0.01W 0402
3HA2	4822 117 13606	10kΩ 5% 0.01W 0402
3HA3	4822 117 13602	2.2kΩ 5% 0.01W 0402
3HA4	4822 117 13545	100Ω 1% 0402
3HA5	4822 117 13545	100Ω 1% 0402
3HA6	4822 117 13545	100Ω 1% 0402
3HA7	4822 117 13545	100Ω 1% 0402
3HA8	4822 117 13545	100Ω 1% 0402
3HA9	4822 117 13545	100Ω 1% 0402
3HAA	4822 117 13545	100Ω 1% 0402
3HAB	4822 117 13545	100Ω 1% 0402
3HAC	4822 117 13545	100Ω 1% 0402
3HAD	4822 117 13545	100Ω 1% 0402
3HAE	4822 117 13545	100Ω 1% 0402
3HAF	4822 117 13545	100Ω 1% 0402
3HAG	4822 117 13601	22kΩ 5% 0402
3HAH	4822 117 13601	22kΩ 5% 0402
3HC0	4822 117 13606	10kΩ 5% 0.01W 0402
3HC1	4822 117 11297	100kΩ 5% 0.1W
3HC2	4822 117 13606	10kΩ 5% 0.01W 0402
3HC3	4822 117 13545	100Ω 1% 0402
3HC4	4822 117 13545	100Ω 1% 0402
3HC5	4822 117 13545	100Ω 1% 0402
3HC6	4822 117 13545	100Ω 1% 0402
3HC7	4822 117 13606	10kΩ 5% 0.01W 0402
3HC8	4822 117 13606	10kΩ 5% 0.01W 0402
3HC9	4822 117 13606	10kΩ 5% 0.01W 0402
3HD0	3198 031 01220	1.2kΩ 5% 0.01W 0402
3HD2	4822 117 13606	10kΩ 5% 0.01W 0402
3HD3	4822 117 13602	2.2kΩ 5% 0.01W 0402
3HDJ	4822 117 13606	10kΩ 5% 0.01W 0402
3HDK	4822 117 13606	10kΩ 5% 0.01W 0402
3HDL	4822 117 13606	10kΩ 5% 0.01W 0402
3HDM	3198 031 01830	18kΩ 5% 0.01W 0402
3HDN	4822 117 13548	1kΩ 5% 0402
3HDP	4822 117 13603	33kΩ 5% 0402
3HES	4822 117 13606	10kΩ 5% 0.01W 0402
3HET	4822 117 13606	10kΩ 5% 0.01W 0402
3HEU	4822 117 13545	100Ω 1% 0402
3HEV	4822 117 13606	10kΩ 5% 0.01W 0402
3HF0	4822 117 13605	Jumper 0402
3HF1	4822 117 13545	100Ω 1% 0402
3HF2	4822 117 13605	Jumper 0402
3HF3	4822 117 13606	10kΩ 5% 0.01W 0402
3HF4	3198 031 02290	22Ω 5% 0.1W 0402
3HF5	4822 117 13545	100Ω 1% 0402
3HF9	4822 117 13597	330Ω 5% 0.01W 0402
3HFA	4822 117 13606	10kΩ 5% 0.01W 0402
3HFB	4822 117 13606	10kΩ 5% 0.01W 0402
3HFC	4822 117 13606	10kΩ 5% 0.01W 0402
3HFD	4822 117 13606	10kΩ 5% 0.01W 0402
3HFE	4822 117 13606	10kΩ 5% 0.01W 0402
3HFF	4822 117 13606	10kΩ 5% 0.01W 0402

3HFH	3198 031 02290	22Ω 5% 0.1W 0402
3HFY	4822 117 13606	10kΩ 5% 0.01W 0402
3HFZ	4822 117 13606	10kΩ 5% 0.01W 0402
3HG1	3198 031 03390	33Ω 1% 0402
3HG2	3198 031 03390	33Ω 1% 0402
3HG3	3198 031 03390	33Ω 1% 0402
3HG4	3198 031 03390	33Ω 1% 0402
3HG5	3198 031 03390	33Ω 1% 0402
3HG6	3198 031 03390	33Ω 1% 0402
3HG7	3198 031 03390	33Ω 1% 0402
3HG8	3198 031 03390	33Ω 1% 0402
3HG9	3198 031 03390	33Ω 1% 0402
3HGA	3198 031 03390	33Ω 1% 0402
3HGB	3198 031 03390	33Ω 1% 0402
3HGC	3198 031 03390	33Ω 1% 0402
3HGD	3198 031 03390	33Ω 1% 0402
3HGE	3198 031 03390	33Ω 1% 0402
3HGF	3198 031 03390	33Ω 1% 0402
3HGG	3198 031 03390	33Ω 1% 0402
3HGH	3198 031 03390	33Ω 1% 0402
3HGJ	3198 031 03390	33Ω 1% 0402
3HGK	3198 031 03390	33Ω 1% 0402
3HGM	3198 031 03390	33Ω 1% 0402
3HGN	3198 031 03390	33Ω 1% 0402
3HGP	3198 031 03390	33Ω 1% 0402
3HGR	3198 031 03390	33Ω 1% 0402
3HGS	3198 031 03390	33Ω 1% 0402
3HGT	3198 031 03390	33Ω 1% 0402
3HGU	3198 031 03390	33Ω 1% 0402
3HGV	3198 031 03390	33Ω 1% 0402
3HGW	3198 031 03390	33Ω 1% 0402
3HGY	3198 031 03390	33Ω 1% 0402
3HGZ	3198 031 03390	33Ω 1% 0402
3HH0	3198 031 03390	33Ω 1% 0402
3HH1	3198 031 03390	33Ω 1% 0402
3HH2	3198 031 03390	33Ω 1% 0402
3HH3	3198 031 03390	33Ω 1% 0402
3HH4	3198 031 03390	33Ω 1% 0402
3HH5	3198 031 03390	33Ω 1% 0402
3HH6	3198 031 03390	33Ω 1% 0402
3HH7	3198 031 03390	33Ω 1% 0402
3HH8	3198 031 03390	33Ω 1% 0402
3HH9	3198 031 03390	33Ω 1% 0402
3HHA	3198 031 03390	33Ω 1% 0402
3HHB	3198 031 03390	33Ω 1% 0402
3HHC	3198 031 03390	33Ω 1% 0402
3HHD	3198 031 03390	33Ω 1% 0402
3HHE	3198 031 03390	33Ω 1% 0402
3HHF	3198 031 03390	33Ω 1% 0402
3HHG	3198 031 03390	33Ω 1% 0402
3HHH	3198 031 03390	33Ω 1% 0402
3HHJ	3198 031 03390	33Ω 1% 0402
3HHK	3198 031 03390	33Ω 1% 0402
3HHM	3198 031 03390	33Ω 1% 0402
3HHN	3198 031 03390	33Ω 1% 0402
3HHP	3198 031 03390	33Ω 1% 0402
3HHR	3198 031 03390	33Ω 1% 0402
3HHS	3198 031 03390	33Ω 1% 0402
3HHT	3198 031 03390	33Ω 1% 0402
3HHU	3198 031 03390	33Ω 1% 0402
3HHV	3198 031 03390	33Ω 1% 0402
3HHW	3198 031 03390	33Ω 1% 0402
3HHY	3198 031 03390	33Ω 1% 0402
3HHZ	3198 031 03390	33Ω 1% 0402
3HJ0	4822 117 13596	220Ω 5% 0.01W 0402
3HJ1	2322 706 75601	560Ω 1% 0402
3HJ2	2322 706 75601	560Ω 1% 0402
3HJ3	2322 706 75601	560Ω 1% 0402
3HJ4	2322 706 75601	560Ω 1% 0402
3HJ5	2322 706 75602	5.6kΩ 5% 0402
3HJV	4822 117 13605	Jumper 0402
3HJW	4822 117 13605	Jumper 0402
3HJY	2322 706 78201	820Ω 0402
3HJZ	3198 031 03320	3.3kΩ 5% 0402
3HK0	3198 031 01230	12kΩ 5% 0402
3HK2	3198 031 01590	15Ω 5% 0402
3HME	4822 117 13606	10kΩ 5% 0.01W 0402
3HMF	4822 117 13606	10kΩ 5% 0.01W 0402
3HMG	3198 031 05620	5.6kΩ 5% 0.01W 0402
3HMH	4822 117 13606	10kΩ 5% 0.01W 0402
3HMJ	4822 117 13606	10kΩ 5% 0.01W 0402
3HMK	3198 031 05620	5.6kΩ 5% 0.01W 0402
3HMM	4822 117 13606	10kΩ 5% 0.01W 0402
3HMN	4822 117 13606	10kΩ 5% 0.01W 0402
3HMP	3198 031 05620	5.6kΩ 5% 0.01W 0402
3HMR	4822 117 13606	10kΩ 5% 0.01W 0402
3HMS	4822 117 13606	10kΩ 5% 0.01W 0402
3HMT	3198 031 05620	5.6kΩ 5% 0.01W 0402
3HP2	3198 031 03390	33Ω 1% 0402
3HP3	3198 031 03390	33Ω 1% 0402
3HP4	3198 031 03390	33Ω 1% 0402
3HP5	3198 031 03390	33Ω 1% 0402
3HP6	3198 031 03390	33Ω 1% 0402
3HP7	3198 031 03390	33Ω 1% 0402
3HP8	4822 117 13606	10kΩ 5% 0.01W 0402
3HP9	3198 031 01230	12kΩ 5% 0402
3HPA	4822 117 13545	100Ω 1% 0402
3HPB	4822 117 13545	100Ω 1% 0402
3HPC	3198 031 04720	4.7kΩ 5% 0402
3HPD	4822 117 13545	100Ω 1% 0402
3HPE	4822 117 13545	100Ω 1% 0402
3HPF	4822 117 13545	100Ω 1% 0402
3HPG	4822 117 13545	100Ω 1% 0402
3HPH	4822 117 13545	100Ω 1% 0402
3HPJ	4822 117 13545	100Ω 1% 0402
3HPK	4822 117 13602	2.2kΩ 5% 0.01W 0402
3HPM	4822 117 13602	2.2kΩ 5% 0.01W 0402
3HPN	3198 031 06890	68Ω 5% 0402
3HPQ	4822 117 13605	Jumper 0402
3HPR	4822 117 13605	Jumper 0402
3HPS	4822 117 13605	Jumper 0402
3HPT	4822 117 13605	Jumper 0402
3HPU	4822 117 13605	Jumper 0402
3HPW	4822 117 13605	Jumper 0402
3HPX	3198 031 04720	4.7kΩ 5% 0402
3HPY	3198 031 04720	4.7kΩ 5% 0402
3HPZ	3198 031 04720	4.7kΩ 5% 0402
3HR0	3198 031 01230	12kΩ 5% 0402
3HR1	4822 117 13601	22kΩ 5% 0402
3HR2	3198 031 01230	12kΩ 5% 0402
3HR3	3198 031 01230	12kΩ 5% 0402
3HR4	4822 117 13601	22kΩ 5% 0402
3HR5	3198 031 01230	12kΩ 5% 0402
3HR6	4822 117 13601	22kΩ 5% 0402
3HR7	3198 031 01230	12kΩ 5% 0402
3HR8	4822 117 13601	22kΩ 5% 0402
3HR9	3198 031 01230	12kΩ 5% 0402
3HRA	4822 117 13601	22kΩ 5% 0402
3HRB	3198 031 01230	12kΩ 5% 0402
3HRC	4822 117 13601	22kΩ 5% 0402
3HRD	3198 031 01230	12kΩ 5% 0402
3HRE	4822 117 13601	22kΩ 5% 0402
3HRF	3198 031 01230	12kΩ 5% 0402
3HRG	4822 117 13601	22kΩ 5% 0402
3HRH	3198 031 01230	12kΩ 5% 0402
3HRJ	4822 117 13601	22kΩ 5% 0402
3HRK	3198 031 07590	75Ω 5% 0402
3HRM	3198 031 04720	4.7kΩ 5% 0402
3HRN	3198 031 04720	4.7kΩ 5% 0402
3HRP	4822 117 13546	47Ω 5% 0402
3HRT	4822 117 13546	47Ω 5% 0402
3HRV	4822 117 13546	47Ω 5% 0402
3HRY	4822 117 13546	47Ω 5% 0402
3HS0	4822 117 13546	47Ω 5% 0402
3HS2	4822 117 13546	47Ω 5% 0402
3HS3	3198 031 03910	390Ω 1% 0402
3HS4	3198 031 03910	390Ω 1% 0402
3HS5	3198 031 04720	4.7kΩ 5% 0402
3HS6	3198 031 07590	75Ω 5% 0402
3HS7	3198 031 07590	75Ω 5% 0402
3HS8	4822 117 13596	220Ω 5% 0.01W 0402
3HS9	4822 117 13545	100Ω 1% 0402
3HSA	4822 117 13546	47Ω 5% 0402
3HSC	4822 117 13601	22kΩ 5% 0402
3HSD	4822 117 13546	47Ω 5% 0402
3HSJ	4822 117 13546	47Ω 5% 0402
3HSL	4822 117 13546	47Ω 5% 0402
3HSN	4822 117 13546	47Ω 5% 0402
3HSQ	4822 117 13605	Jumper 0402
3HST	4822 117 13545	100Ω 1% 0402
3HSU	4822 117 13546	47Ω 5% 0402
3HSV	4822 117 13596	220Ω 5% 0.01W 0402
3HSZ	4822 117 13605	Jumper 0402
3HT1	4822 117 13605	Jumper 0402
3HT3	4822 117 13546	47Ω 5% 0402
3HT5	4822 117 13605	Jumper 0402
3HT7	3198 031 03390	33Ω 1% 0402
3HT8	3198 031 03390	33Ω 1% 0402
3HT9	3198 031 04720	4.7kΩ 5% 0402
3HV3	4822 117 13601	22kΩ 5% 0402
3HV4	4822 117 13601	22kΩ 5% 0402
3HV7	4822 117 13601	22kΩ 5% 0402
3HV8	4822 117 13601	22kΩ 5% 0402
3HVN	3198 031 03390	33Ω 1% 0402
3HVP	3198 031 03390	33Ω 1% 0402
3HVR	3198 031 03390	33Ω 1% 0402
3HVS	3198 031 03390	33Ω 1% 0402
3HVT	3198 031 01230	12kΩ 5% 0402
3HVW	4822 117 13601	22kΩ 5% 0402
3HVX	4822 117 13601	22kΩ 5% 0402
3HVY	3198 031 04730	47Ω 5% 0402
3HW0	2020 552 96628	10nF 10% 16V 0402
3HWK	3198 031 04720	4.7kΩ 5% 0402
3HWM	3198 031 03390	33Ω 1% 0402
3HWN	3198 031 03390	33Ω 1% 0402
3HWP	3198 031 03390	33Ω 1% 0402
3HWR	3198 031 03390	33Ω 1% 0402
3HWS	3198 031 03390	33Ω 1% 0402
3HWT	3198 031 03390	33Ω 1% 0402
3HWU	3198 031 03390	33Ω 1% 0402
3HWV	3198 031 03390	33Ω 1% 0402
3HWW	3198 031 03390	33Ω 1% 0402
3HWY	3198 031 03390	33Ω 1% 0402
3HWZ	3198 031 03390	33Ω 1% 0402
3J09	4822 117 13545	100Ω 1% 0402
3J11	4822 117 13545	100Ω 1% 0402
3J12	4822 117 13545	100Ω 1% 0402
3J13	4822 117 13605	Jumper 0402
3J14	4822 117 11297	100kΩ 5% 0.1W
3J15	4822 117 13545	100Ω 1% 0402
3J16	4822 117 11297	100kΩ 5% 0.1W
3J17	4822 117 13545	100Ω 1% 0402
3J18	4822 117 11297	100kΩ 5% 0.1W
3J20	4822 117 13606	10kΩ 5% 0.01W 0402
3J21	4822 117 11297	100kΩ 5% 0.1W
3J22	4822 117 13606	10kΩ 5% 0.01W 0402
3J23	4822 117 13606	10kΩ 5% 0.01W 0402
3J24	4822 117 11297	100kΩ 5% 0.1W
3J29	4822 117 13545	100Ω 1% 0402
3J30	4822 117 11748	Fuse 2.2Ω 5% 1206
3J31	4822 117 13601	22kΩ 5% 0402
3J32	3198 031 07590	75Ω 5% 0402
3J33	3198 031 04730	47Ω 5% 0402
3J34	3198 031 06890	68Ω 5% 0402
3J35	4822 117 13596	220Ω 5% 0.01W 0402
3J50	4822 117 13545	100Ω 1% 0402
3J51	3198 031 01510	150Ω 5% 0.01W 0402
3J53	4822 117 13548	1kΩ 5% 0402
3J54	4822 117 11297	100kΩ 5% 0.1W
3J57	4822 117 13545	100Ω 1% 0402
3J58	3198 031 01510	150Ω 5% 0.01W 0402
3J59	4822 117 13548	1kΩ 5% 0402
3J60	4822 117 11297	100kΩ 5% 0.1W
3JA0	4822 117 13545	100Ω 1% 0402
3JA1	4822 117 13545	100Ω 1% 0402
3JA4	4822 117 13606	10kΩ 5% 0.01W 0402
3JA5	3198 031 04730	47Ω 5% 0402
3JA6	3198 031 04730	47Ω 5% 0402
3JA7	4822 117 13545	100Ω 1% 0402
3JA8	4822 117 13545	100Ω 1% 0402
3JA9	4822 117 13548	1kΩ 5% 0402
3JB0	4822 117 13545	100Ω 1% 0402
3JB3	4822 117 13606	10kΩ 5% 0.01W 0402
3JB4	3198 031 04730	47Ω 5% 0402
3JB5	3198 031 04730	47Ω 5% 0402
3JB6	4822 117 13545	100Ω 1% 0402
3JB7	3198 031 02290	22Ω 5% 0.1W 0402
3JB8	4822 117 13606	10kΩ 5% 0.01W 0402
3JC0	4822 117 13545	100Ω 1% 0402
3JC1	3198 031 02290	22Ω 5% 0.1W 0402
3JC2	4822 117 13606	10kΩ 5% 0.01W 0402
3JC3	4822 117 13548	1kΩ 5% 0402
3JC5	4822 117 13545	100Ω 1% 0402
3JC7	3198 031 04720	4.7kΩ 5% 0402
3JC8	3198 031 04720	4.7kΩ 5% 0402
3JE0	4822 117 13545	100Ω 1% 0402
3JE1	4822 117 13545	100Ω 1% 0402
3JE2	4822 117 13545	100Ω 1% 0402
3JE3	4822 117 13545	100Ω 1% 0402
3JE4	4822 117 13545	100Ω 1% 0402
3JE5	4822 117 13545	100Ω 1% 0402
3JG1	4822 117 13606	10kΩ 5% 0.01W 0402
3JG2	3198 031 04730	47Ω 5% 0402
3JG3	3198 031 04730	47Ω 5% 0402
3JG4	2020 552 96628	10nF 10% 16V 0402
3JG5	4822 117 13545	100Ω 1% 0402
3JG6	4822 117 13545	100Ω 1% 0402
3JG7	4822 117 13545	100Ω 1% 0402
3JG8	3198 031 02290	22Ω 5% 0.1W 0402
3JG9	4822 117 13606	10kΩ 5% 0.01W 0402
3JH1	4822 117 13548	1kΩ 5% 0402
3JH3	3198 031 04720	4.7kΩ 5% 0402
3JH4	4822 117 13605	Jumper 0402
3JH5	2322 705 70184	180Ω 5% 0402
3JH6	4822 117 13545	100Ω 1% 0402
3N01	4822 117 13606	10kΩ 5% 0.01W 0402
3N03	2322 706 71103	11kΩ 1% 0402
3N04	4822 117 13606	10kΩ 5% 0.01W 0402
3N10	3198 031 04720	4.7kΩ 5% 0402
3N13	4822 117 13545	100Ω 1% 0402
3N14	3198 031 01530	15kΩ 5% 0.01W 0402
3N15	3198 031 01530	15kΩ 5% 0.01W 0402
3N16	3198 031 01530	15kΩ 5% 0.01W 0402
3N17	3198 031 01530	15kΩ 5% 0.01W 0402
3N18	4822 117 13606	10kΩ 5% 0.01W 0402
3N19	4822 117 13606	10kΩ 5% 0.01W 0402
3N20	4822 117 13606	10kΩ 5% 0.01W 0402
3N51	4822 117 13545	100Ω 1% 0402
3N52	4822 117 13545	100Ω 1% 0402
3N53	4822 117 13545	100Ω 1% 0402
3N54	4822 117 13545	100Ω 1% 0402
3N56	3198 031 01090	10Ω 5% 0.01W 0402

3T05	4822 117 13606	10kΩ 5% 0.01W 0402
3T07	4822 117 13597	330Ω 5% 0.01W 0402
3T08	4822 117 13597	330Ω 5% 0.01W 0402
3T09	3198 031 03390	33Ω 1% 0402
3T10	3198 031 04720	4.7kΩ 5% 0402
3T11	3198 031 04720	4.7kΩ 5% 0402
3T12	2322 705 87189	18Ω 5% 0402
3T13	2322 705 87189	18Ω 5% 0402
3T14	3198 031 03390	33Ω 1% 0402
3T15	3198 031 03320	3.3kΩ 5% 0402
3T16	3198 031 03320	3.3kΩ 5% 0402
3T17	4822 117 13548	1kΩ 5% 0402
3T18	4822 117 13545	100Ω 1% 0402
3T19	3198 031 03910	390Ω 1% 0402
3T20	4822 117 13545	100Ω 1% 0402
3T21	3198 031 03390	33Ω 1% 0402
3T22	3198 031 03390	33Ω 1% 0402
3T23	3198 031 03390	33Ω 1% 0402
3T24	3198 031 03390	33Ω 1% 0402
3T25	4822 117 13548	1kΩ 5% 0402
3T29	3198 031 03910	390Ω 1% 0402
3T30	3198 031 03320	3.3kΩ 5% 0402
3T31	3198 031 03320	3.3kΩ 5% 0402
3T32	3198 031 03320	3.3kΩ 5% 0402
3T33	3198 031 03320	3.3kΩ 5% 0402
3T34	3198 031 03320	3.3kΩ 5% 0402
3T35	3198 031 03320	3.3kΩ 5% 0402
3T36	3198 031 03320	3.3kΩ 5% 0402
3T37	4822 117 13545	100Ω 1% 0402
3T38	4822 117 13545	100Ω 1% 0402
3T40	3198 031 03390	33Ω 1% 0402
3T41	3198 031 03390	33Ω 1% 0402
3T42	3198 031 03390	33Ω 1% 0402
3T43	3198 031 03390	33Ω 1% 0402
3T44	3198 031 03390	33Ω 1% 0402
3T45	3198 031 03390	33Ω 1% 0402
3T46	3198 031 03390	33Ω 1% 0402
3T47	3198 031 03390	33Ω 1% 0402
3T48	3198 031 04720	4.7kΩ 5% 0402
3T53	4822 117 13546	47Ω 5% 0402
3T54	4822 117 13597	330Ω 5% 0.01W 0402
3T55	3198 031 08220	8.2kΩ 5% 0.5W
3T56	4822 117 13545	100Ω 1% 0402
3T57	4822 117 13545	100Ω 1% 0402
3T58	3198 031 03910	390Ω 1% 0402
3T59	3198 031 03910	390Ω 1% 0402
3T68	3198 031 04720	4.7kΩ 5% 0402
3T69	4822 117 11297	100kΩ 5% 0.1W
3T70	3198 031 04720	4.7kΩ 5% 0402
3T74	4822 117 13543	470Ω 5% 0402
3T75	3198 031 02720	2.7kΩ 5% 0.01W 0402
3T76	3198 031 03320	3.3kΩ 5% 0402
3T77	4822 117 13546	47Ω 5% 0402
3T78	4822 117 13606	10kΩ 5% 0.01W 0402
3T80	4822 117 13606	10kΩ 5% 0.01W 0402
3T81	3198 031 01520	1.2kΩ 5% 0.01W 0402
3T82	4822 117 13596	220Ω 5% 0.01W 0402
3T83	3198 031 06890	68Ω 5% 0402
3T84	4822 117 13596	220Ω 5% 0.01W 0402
3T86	4822 117 13543	470Ω 5% 0402
3T87	4822 117 13602	2.2kΩ 5% 0.01W 0402
3T88	4822 117 13602	2.2kΩ 5% 0.01W 0402
3T89	3198 031 03320	3.3kΩ 5% 0402
3T90	4822 117 13548	1kΩ 5% 0402
3T91	4822 117 11297	100kΩ 5% 0.1W
3T92	4822 117 13606	10kΩ 5% 0.01W 0402
3T93	4822 117 13548	1kΩ 5% 0402
3T94	4822 117 13606	10kΩ 5% 0.01W 0402
3T95	4822 117 11297	100kΩ 5% 0.1W
3U00	4822 117 13606	10kΩ 5% 0.01W 0402
3U01	5322 117 11726	10Ω 5%
3U02	4822 117 13606	10kΩ 5% 0.01W 0402
3U04	3198 031 01050	1MΩ 5% 0402
3U05	4822 117 13606	10kΩ 5% 0.01W 0402
3U06	3198 031 02290	22Ω 5% 0.1W 0402
3U07	4822 117 13545	100Ω 1% 0402
3U08	3198 031 02290	22Ω 5% 0.1W 0402
3U09	2322 706 71002	1kΩ 1% 0402
3U10	4822 117 13548	1kΩ 5% 0402
3U11	4822 117 13605	Jumper 0402
3U12	4822 117 13606	10kΩ 5% 0.01W 0402
3U13	4822 117 13606	10kΩ 5% 0.01W 0402
3U14	4822 117 13601	22kΩ 5% 0402
3U15	3198 031 04780	4.7Ω 5% 0402
3U17	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U18	4822 117 13596	220Ω 5% 0.01W 0402
3U20	3198 031 02290	22Ω 5% 0.1W 0402
3U21	3198 031 04730	47Ω 5% 0402
3U23	3198 031 04780	4.7Ω 5% 0402
3U24	4822 117 13548	1kΩ 5% 0402
3U25	4822 117 13601	22kΩ 5% 0402
3U26	3198 031 03320	3.3kΩ 5% 0402
3U27	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U29	3198 031 04730	47Ω 5% 0402
3U30	4822 117 13597	330Ω 5% 0.01W 0402
3U31	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U32	3198 031 03930	39kΩ 5% 0402
3U33	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U34	4822 117 13603	33kΩ 5% 0402
3U36	4822 117 13548	1kΩ 5% 0402
3U37	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U38	4822 117 13603	33kΩ 5% 0402
3U40	3198 031 03320	3.3kΩ 5% 0402
3U41	4822 117 13545	100Ω 1% 0402
3U42	4822 117 13602	2.2kΩ 5% 0.01W 0402
3U43	3198 031 03320	3.3kΩ 5% 0402
3U44	4822 117 13606	10kΩ 5% 0.01W 0402
3U45	3198 031 06890	68Ω 5% 0402
3U46	3198 031 02290	22Ω 5% 0.1W 0402
3U47	2322 706 71201	120Ω 1% 0402
3U48	3198 031 06890	68Ω 5% 0402
3U49	4822 117 13548	1kΩ 5% 0402
3U50	4822 117 13548	1kΩ 5% 0402
3U51	2322 706 75601	560Ω 1% 0402
3U52	4822 117 13548	1kΩ 5% 0402
3U55	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U56	2322 706 72201	220Ω 1% 0402
3U57	2322 706 76809	68Ω 1% 0402 RC32
3U58	4822 117 13606	10kΩ 5% 0.01W 0402
3U59	3198 031 03320	3.3kΩ 5% 0402
3U60	4822 117 11297	100kΩ 5% 0.1W
3U61	4822 117 13606	10kΩ 5% 0.01W 0402
3U62	4822 117 13543	470Ω 5% 0402
3U63	4822 117 13548	1kΩ 5% 0402
3U64	4822 117 13602	2.2kΩ 5% 0.01W 0402
3U69	2322 706 71002	1kΩ 1% 0402
3U70	2322 706 71002	1kΩ 1% 0402
3U74	2322 706 74701	470Ω 1% 0402
3U75	2322 706 74702	4.7kΩ 5% 0402
3U76	4822 117 13596	220Ω 5% 0.01W 0402
3U77	2322 706 71201	120Ω 1% 0402
3U78	4822 117 13601	22kΩ 5% 0402
3U79	4822 117 11297	100kΩ 5% 0.1W
3U80	3198 031 02240	220kΩ 5% 0.1W 0402
3U81	4822 117 11297	100kΩ 5% 0.1W
3U82	4822 117 11297	100kΩ 5% 0.1W
3U83	4822 117 11297	100kΩ 5% 0.1W
3U84	4822 117 11297	100kΩ 5% 0.1W
3U85	4822 117 13548	1kΩ 5% 0402
3U86	2322 762 60479	47Ω 5% 2512
3U87	4822 117 13597	330Ω 5% 0.01W 0402
3U88	2322 706 71002	1kΩ 1% 0402
3U89	4822 117 13602	2.2kΩ 5% 0.01W 0402
3U90	2322 762 60479	47Ω 5% 2512
3U91	4822 117 13548	1kΩ 5% 0402
3U92	2322 762 60479	47Ω 5% 2512
3U94	4822 117 11151	1Ω 5%
3UA1	4822 117 13543	470Ω 5% 0402
3UA2	3198 031 02290	22Ω 5% 0.1W 0402
3UA3	3198 031 02290	22Ω 5% 0.1W 0402
3UA4	3198 031 02290	22Ω 5% 0.1W 0402
3UA5	3198 031 04780	4.7Ω 5% 0402
3UA6	3198 031 04780	4.7Ω 5% 0402
3UA7	4822 117 13605	Jumper 0402
3UA8	4822 117 13605	Jumper 0402
3UA9	3198 031 02290	22Ω 5% 0.1W 0402
3u39	3198 031 90010	Jumper 0402
9B06	4822 051 20008	Jumper 0805
9B10	4822 117 13605	Jumper 0402
9B11	4822 117 13605	Jumper 0402
9D02	2422 549 43769	Bead 30Ω at 100MHz
9D03	2422 549 43769	Bead 30Ω at 100MHz
9D04	2422 549 43769	Bead 30Ω at 100MHz
9D05	2422 549 43769	Bead 30Ω at 100MHz
9E10	4822 117 13605	Jumper 0402
9E11	4822 117 13605	Jumper 0402
9E12	4822 117 13605	Jumper 0402
9E70	4822 117 13605	Jumper 0402
9E72	4822 117 13605	Jumper 0402
9E73	4822 117 13605	Jumper 0402
9E90	4822 117 13605	Jumper 0402
9E91	4822 117 13605	Jumper 0402
9F50	4822 117 13605	Jumper 0402
9F51	4822 117 13605	Jumper 0402
9F93	4822 117 13605	Jumper 0402
9F94	4822 117 13605	Jumper 0402
9FA1	4822 117 13605	Jumper 0402
9G49	4822 117 13605	Jumper 0402
9G53	4822 117 13605	Jumper 0402
9G54	4822 117 13605	Jumper 0402
9G55	4822 117 13605	Jumper 0402
9G77	4822 051 20008	Jumper 0805
9G78	4822 051 20008	Jumper 0805
9H05	4822 117 13605	Jumper 0402
9H06	4822 117 13605	Jumper 0402
9H09	4822 117 13605	Jumper 0402
9H10	4822 117 13605	Jumper 0402
9H20	4822 117 13605	Jumper 0402
9H21	4822 117 13605	Jumper 0402
9H22	4822 117 13605	Jumper 0402
9H23	4822 117 13605	Jumper 0402
9H24	4822 117 13605	Jumper 0402
9H25	4822 117 13605	Jumper 0402
9H26	4822 117 13605	Jumper 0402
9H27	4822 117 13605	Jumper 0402
9H28	4822 117 13605	Jumper 0402
9H29	4822 117 13605	Jumper 0402
9H30	4822 117 13605	Jumper 0402
9H31	4822 117 13605	Jumper 0402
9H32	4822 117 13605	Jumper 0402
9H33	4822 117 13605	Jumper 0402
9H34	4822 117 13605	Jumper 0402
9H35	4822 117 13605	Jumper 0402
9H36	4822 117 13605	Jumper 0402
9H37	4822 117 13605	Jumper 0402
9H40	4822 117 13605	Jumper 0402
9H41	4822 117 13605	Jumper 0402
9H42	4822 117 13605	Jumper 0402
9HC0	4822 117 13605	Jumper 0402
9HD0	4822 117 13605	Jumper 0402
9HF4	4822 117 13605	Jumper 0402
9HF5	4822 117 13605	Jumper 0402
9HF6	4822 117 13605	Jumper 0402
9HF7	4822 117 13605	Jumper 0402
9HF8	4822 117 13605	Jumper 0402
9HG0	4822 117 13605	Jumper 0402
9HG1	4822 117 13605	Jumper 0402
9HM1	4822 117 13605	Jumper 0402
9HM2	4822 117 13605	Jumper 0402
9HP5	4822 117 13605	Jumper 0402
9HP6	4822 117 13605	Jumper 0402
9HP7	4822 117 13605	Jumper 0402
9HP8	4822 117 13605	Jumper 0402
9HP9	4822 117 13605	Jumper 0402
9HW3	4822 117 13546	47Ω 5% 0402
9HW4	4822 117 13546	47Ω 5% 0402
9HW5	4822 117 13546	47Ω 5% 0402
9HW6	4822 117 13546	47Ω 5% 0402
9HW7	4822 117 13546	47Ω 5% 0402
9HW8	4822 117 13546	47Ω 5% 0402
9HW9	4822 117 13546	47Ω 5% 0402
9HWA	4822 117 13546	47Ω 5% 0402
9HWB	4822 117 13546	47Ω 5% 0402
9HWC	4822 117 13546	47Ω 5% 0402
9HWD	4822 117 13546	47Ω 5% 0402
9HWE	4822 117 13605	Jumper 0402
9HWF	4822 117 13605	Jumper 0402
9HWG	4822 117 13605	Jumper 0402
9HWH	4822 117 13605	Jumper 0402
9HWJ	4822 117 13546	47Ω 5% 0402
9HWK	4822 117 13546	47Ω 5% 0402
9HWM	4822 117 13546	47Ω 5% 0402
9HWN	4822 117 13546	47Ω 5% 0402
9HWP	4822 117 13546	47Ω 5% 0402
9HWR	4822 117 13546	47Ω 5% 0402
9HWS	4822 117 13546	47Ω 5% 0402
9HWT	4822 117 13546	47Ω 5% 0402
9HWU	4822 117 13546	47Ω 5% 0402
9HWV	4822 117 13546	47Ω 5% 0402
9HWW	4822 117 13546	47Ω 5% 0402
9HWY	4822 117 13546	47Ω 5% 0402
9HWZ	4822 117 13546	47Ω 5% 0402
9J01	4822 117 13605	Jumper 0402
9J02	4822 117 13605	Jumper 0402
9J03	4822 117 13605	Jumper 0402
9J04	4822 117 13605	Jumper 0402
9J05	4822 117 13605	Jumper 0402
9J06	4822 117 13605	Jumper 0402
9J07	4822 117 13605	Jumper 0402
9JA0	4822 117 13605	Jumper 0402
9JA1	4822 117 13605	Jumper 0402
9JA2	4822 117 13605	Jumper 0402
9JA3	4822 117 13605	Jumper 0402
9JA4	4822 117 13605	Jumper 0402
9JA5	4822 117 13605	Jumper 0402
9JA6	4822 117 13605	Jumper 0402
9JA7	4822 117 13605	Jumper 0402
9JE5	4822 117 13605	Jumper 0402
9JE6	4822 117 13605	Jumper 0402
9JE8	4822 117 13605	Jumper 0402
9JE9	4822 117 13605	Jumper 0402
9JF0	4822 117 13605	Jumper 0402
9N01	4822 117 13605	Jumper 0402
9N02	4822 117 13605	Jumper 0402
9N04	4822 051 30008	Jumper 0603
9N10	4822 117 13605	Jumper 0402
9N50	4822 117 13605	Jumper 0402
9T11	4822 117 13606	10kΩ 5% 0.01W 0402
9T12	4822 117 13606	10kΩ 5% 0.01W 0402
9T14	4822 117 13605	Jumper 0402
9T15	4822 051 20008	Jumper 0805
9T16	4822 051 20008	Jumper 0805

9T51	4822 117 13605	Jumper 0402
9T52	4822 117 13605	Jumper 0402
9T57	4822 117 13605	Jumper 0402
9T60	4822 117 13605	Jumper 0402
9T62	4822 117 13605	Jumper 0402
9T85	4822 117 13605	Jumper 0402
9T86	4822 117 13605	Jumper 0402
9U03	4822 117 13605	Jumper 0402

5B00	2422 549 01459	Mains Filter UF2327L
5B01	2422 531 00154	Trafo BS28603-00
5B10	2422 549 42896	Bead 120Ω 100MHz
5B11	2422 549 42896	Bead 120Ω 100MHz
5B12	2422 549 42896	Bead 120Ω 100MHz
5B13	2422 549 42896	Bead 120Ω 100MHz
5B14	2422 549 42896	Bead 120Ω 100MHz
5D00	2422 536 00587	22µH 10%
5D01	2422 549 43769	Bead 30Ω at 100MHz
5D02	2422 549 43769	Bead 30Ω at 100MHz
5D03	2422 549 43769	Bead 30Ω at 100MHz
5D04	2422 549 43769	Bead 30Ω at 100MHz
5D05	2422 549 00287	Bead 220Ω 100MHz
5D07	2422 536 00587	22µH 10%
5D10	2422 549 00287	Bead 220Ω 100MHz
5D11	2422 549 00287	Bead 220Ω 100MHz
5E01	2422 549 43769	Bead 30Ω at 100MHz
5E02	2422 549 43769	Bead 30Ω at 100MHz
5FA1	2422 549 43769	Bead 30Ω at 100MHz
5FA2	2422 549 00287	Bead 220Ω 100MHz
5FA6	2422 549 43769	Bead 30Ω at 100MHz
5FA7	2422 549 43769	Bead 30Ω at 100MHz
5FA8	2422 549 43769	Bead 30Ω at 100MHz
5FB1	2422 549 00287	Bead 220Ω 100MHz
5FB2	2422 549 00287	Bead 220Ω 100MHz
5G00	2422 549 45325	Bead 67Ω at 100MHz
5G01	2422 549 45325	Bead 67Ω at 100MHz
5G02	2422 549 45325	Bead 67Ω at 100MHz
5G03	2422 549 45325	Bead 67Ω at 100MHz
5G04	2422 549 45325	Bead 67Ω at 100MHz
5G05	2422 549 45325	Bead 67Ω at 100MHz
5G06	2422 549 45325	Bead 67Ω at 100MHz
5G07	2422 549 45325	Bead 67Ω at 100MHz
5G08	2422 549 45325	Bead 67Ω at 100MHz
5G09	2422 549 45325	Bead 67Ω at 100MHz
5G10	2422 549 45325	Bead 67Ω at 100MHz
5G11	2422 549 45325	Bead 67Ω at 100MHz
5G55	2422 549 00287	Bead 220Ω 100MHz
5G56	2422 549 00287	Bead 220Ω 100MHz
5GE0	2422 549 42896	Bead 120Ω 100MHz
5GE1	2422 549 42896	Bead 120Ω 100MHz
5GE2	2422 549 42896	Bead 120Ω 100MHz
5GE3	2422 549 00287	Bead 220Ω 100MHz
5GE4	2422 549 00287	Bead 220Ω 100MHz
5GE5	2422 549 00287	Bead 220Ω 100MHz
5GE6	2422 549 00287	Bead 220Ω 100MHz
5HA0	2422 549 43769	Bead 30Ω at 100MHz
5HG0	2422 549 43769	Bead 30Ω at 100MHz
5HG1	2422 549 43769	Bead 30Ω at 100MHz
5HK0	2422 549 43769	Bead 30Ω at 100MHz
5HK1	4822 157 11506	Bead 120Ω at 100MHz
5HK2	4822 157 11506	Bead 120Ω at 100MHz
5HK3	4822 157 11506	Bead 120Ω at 100MHz
5HK4	2422 549 43769	Bead 30Ω at 100MHz
5HM0	2422 549 00287	Bead 220Ω 100MHz
5HM1	2422 549 00287	Bead 220Ω 100MHz
5HP1	2422 549 43769	Bead 30Ω at 100MHz
5HP2	2422 549 43769	Bead 30Ω at 100MHz
5HR0	3198 018 53370	0.33µH 10% 0603
5HR1	3198 018 51080	1µH 10% 0603
5HR2	3198 018 53370	0.33µH 10% 0603
5HR3	3198 018 53370	0.33µH 10% 0603
5HR4	3198 018 51080	1µH 10% 0603
5HR5	3198 018 53370	0.33µH 10% 0603
5HR6	2422 549 43769	Bead 30Ω at 100MHz
5HR7	2422 549 43769	Bead 30Ω at 100MHz
5HR8	3198 018 52280	2.2µH 10% 0603
5HRC	3198 018 53370	0.33µH 10% 0603
5HRD	3198 018 51070	0.1µH 10% 0603
5HRE	3198 018 51080	1µH 10% 0603
5HRF	3198 018 51070	0.1µH 10% 0603
5HRG	3198 018 53370	0.33µH 10% 0603
5HRH	3198 018 51070	0.1µH 10% 0603
5HRM	3198 018 54770	0.47µH 10% 0603
5HRN	3198 018 52280	2.2µH 10% 0603
5HRP	3198 018 54770	0.47µH 10% 0603
5HRU	3198 018 51080	1µH 10% 0603
5HRW	3198 018 51070	0.1µH 10% 0603
5HRZ	2422 549 43769	Bead 30Ω at 100MHz
5HV0	2422 549 43769	Bead 30Ω at 100MHz
5HY0	2422 549 43769	Bead 30Ω at 100MHz
5HY1	2422 549 00287	Bead 220Ω 100MHz
5HY2	2422 549 43769	Bead 30Ω at 100MHz
5HY3	2422 549 43769	Bead 30Ω at 100MHz
5HY4	2422 549 43769	Bead 30Ω at 100MHz
5HY5	2422 549 43769	Bead 30Ω at 100MHz
5HY6	2422 549 43769	Bead 30Ω at 100MHz
5HY7	2422 549 43769	Bead 30Ω at 100MHz
5HY8	2422 549 43769	Bead 30Ω at 100MHz
5HY9	2422 549 43769	Bead 30Ω at 100MHz
5HYA	2422 549 44197	Bead 220Ω at 100MHz
5J40	2422 549 43769	Bead 30Ω at 100MHz
5J42	2422 549 43769	Bead 30Ω at 100MHz
5J45	2422 549 43769	Bead 30Ω at 100MHz
5JA1	2422 549 43769	Bead 30Ω at 100MHz
5JA2	2422 549 43769	Bead 30Ω at 100MHz
5JA3	2422 549 44197	Bead 220Ω at 100MHz
5JA4	2422 549 44197	Bead 220Ω at 100MHz
5JA5	2422 549 44197	Bead 220Ω at 100MHz
5N00	2422 549 43769	Bead 30Ω at 100MHz
5N01	2422 549 43769	Bead 30Ω at 100MHz
5N02	2422 549 43769	Bead 30Ω at 100MHz
5N03	2422 549 43769	Bead 30Ω at 100MHz
5N04	2422 549 43769	Bead 30Ω at 100MHz
5N30	2422 549 00287	Bead 220Ω 100MHz
5N31	3198 018 53380	3.3µH 10% 0603
5T02	2422 549 00287	Bead 220Ω 100MHz
5T09	2422 536 01389	2.7µH 5% 1008
5T31	2422 549 00287	Bead 220Ω 100MHz
5T32	2422 549 00287	Bead 220Ω 100MHz
5T53	2422 549 00287	Bead 220Ω 100MHz
5T54	2422 549 00287	Bead 220Ω 100MHz
5T60	3198 018 61580	1.5µH 5%
5U00	2422 536 00779	10µH 20%
5U01	2422 536 00671	10µH 20%
5U02	2422 536 00671	10µH 20%
5U03	2422 536 00779	10µH 20%



6B02	3198 020 55680	BZX384-C5V6
6B03	4822 130 11152	UDZ18B
6B04	4822 130 83147	DF06M
6B05	3198 010 10730	SS36
6B06	9322 202 76687	BYW29-200-E3
6B07	9322 085 69668	MBRS1100
6B08	9322 085 69668	MBRS1100
6B09	9322 208 44685	BZG05C6V8
6B10	9322 208 80685	BZG05C15
6B11	9322 203 84685	RS1D-E3
6B13	3198 020 55680	BZX384-C5V6
6B14	3198 020 55680	BZX384-C5V6
6B15	3198 020 55680	BZX384-C5V6
6D15	4822 130 11397	BAS316
6D62	4822 130 11152	UDZ18B
6D63	4822 130 11397	BAS316
6E07	4822 130 11416	PDZ6.8B
6E08	4822 130 11416	PDZ6.8B
6E09	4822 130 11416	PDZ6.8B
6E10	4822 130 10328	BAV99W
6E11	4822 130 10328	BAV99W
6E12	4822 130 11416	PDZ6.8B
6E13	4822 130 11416	PDZ6.8B
6E14	4822 130 10328	BAV99W
6E15	4822 130 10328	BAV99W
6E16	4822 130 11416	PDZ6.8B
6E17	4822 130 11416	PDZ6.8B
6E18	4822 130 10328	BAV99W
6E19	4822 130 10328	BAV99W
6E20	4822 130 11416	PDZ6.8B
6E21	4822 130 11416	PDZ6.8B
6E23	4822 130 11416	PDZ6.8B
6E28	4822 130 11416	PDZ6.8B
6E29	4822 130 11416	PDZ6.8B
6E30	4822 130 11416	PDZ6.8B
6E31	4822 130 11416	PDZ6.8B
6E33	4822 130 11416	PDZ6.8B
6E35	4822 130 11416	PDZ6.8B
6E36	4822 130 11416	PDZ6.8B
6E37	4822 130 11416	PDZ6.8B
6E38	4822 130 11416	PDZ6.8B
6E39	4822 130 11416	PDZ6.8B
6E40	4822 130 11416	PDZ6.8B
6FA0	9322 134 46685	SML-310MT
6FA1	9322 134 46685	SML-310MT
6FA2	9322 134 46685	SML-310MT
6FA3	9322 134 46685	SML-310MT
6FA4	9322 134 46685	SML-310MT
6FA5	9322 134 46685	SML-310MT
6G50	3198 020 55680	BZX384-C5V6
6G51	9322 134 46685	SML-310MT
6GE6	9322 165 17668	STPS2L30A
6GE7	9322 165 17668	STPS2L30A
6H00	4822 130 11397	BAS316
6H01	4822 130 11397	BAS316
6HD0	4822 130 11397	BAS316
6HD1	4822 130 11397	BAS316
6HF0	9322 134 46685	SML-310MT
6HW0	4822 130 11397	BAS316
6HW1	4822 130 11397	BAS316
6J10	4822 130 11397	BAS316
6J12	4822 130 11397	BAS316
6J15	4822 130 11416	PDZ6.8B
6J16	4822 130 11416	PDZ6.8B
6J17	4822 130 11416	PDZ6.8B
6J18	4822 130 11416	PDZ6.8B
6J30	4822 130 11397	BAS316
6J31	4822 130 11397	BAS316
6J40	4822 130 11416	PDZ6.8B
6J41	4822 130 11416	PDZ6.8B
6J42	4822 130 11416	PDZ6.8B
6J43	4822 130 11416	PDZ6.8B
6J44	4822 130 11416	PDZ6.8B
6J45	4822 130 11416	PDZ6.8B
6J46	4822 130 11416	PDZ6.8B
6J47	4822 130 11416	PDZ6.8B
6JA1	4822 130 11397	BAS316
6JA2	4822 130 11397	BAS316
6JA3	4822 130 11397	BAS316
6JA4	4822 130 11397	BAS316
6U00	4822 130 11397	BAS316
6U01	9322 129 41685	BZM55-C12
6U02	9322 129 41685	BZM55-C12
6U04	4822 130 11397	BAS316
6U05	4822 130 11416	PDZ6.8B
6U06	4822 130 11397	BAS316
6U07	9322 165 17668	STPS2L30A
6U08	4822 130 11152	UDZ18B
6U09	9322 165 17668	STPS2L30A
6U10	9340 548 58115	PDZ9.1B



7B00	9340 219 30115	BC817-25W
7B01	3198 010 42320	BC857BW
7B02	3198 010 42320	BC857BW
7B04	9322 149 04682	TCET1102
7B05	9322 194 29687	Pow FET STP5NK60ZFP
7B06	9340 575 87118	PHD38N02LT
7B07	9322 192 16685	TS2431AI
7B50	9340 425 30115	BC847BPN
7D00	9322 213 16668	LM339PW
7D02	9340 425 30115	BC847BPN
7D05	3198 010 42310	BC847BW
7D06	3198 010 44350	BC807-25W
7D09	9340 219 30115	BC817-25W
7D10	8238 277 12651	SI4532ADY
7D30	3198 010 42310	BC847BW
7D31	3198 010 44350	BC807-25W
7D32	9340 425 30115	BC847BPN
7D34	9340 219 30115	BC817-25W
7D35	8238 277 12651	SI4532ADY
7D55	3198 010 44350	BC807-25W
7D58	9340 425 30115	BC847BPN
7D59	3198 010 42310	BC847BW
7D61	9340 219 30115	BC817-25W
7D63	9340 425 30115	BC847BPN
7D64	9340 425 30115	BC847BPN
7D70	3198 010 42310	BC847BW
7F90	9322 247 58671	EP2C8F256C7N
7FA1	3198 010 42310	BC847BW
7FA3	9322 210 01668	EPCS4SI8N
7FA4	9322 247 54685	LDS3985M25
7FA5	9322 215 24668	LD1117DT12
7G53	3198 010 42310	BC847BW
7G54	9322 204 10685	SI3441BDV
7G55	3198 010 42310	BC847BW
7G58	9340 425 30115	BC847BPN
7G59	9340 425 20115	BC847BS
7G61	9340 425 20115	BC847BS
7G65	3198 010 42310	BC847BW
7G66	9340 425 30115	BC847BPN
7GE1	9322 206 45668	M25P05-AVMN6P
7GE2	9322 247 80671	PACIFIC3-N4
7GE3	9322 213 42685	LD3985M25
7GE5	9322 144 97668	LD1117DT
7H00	9352 835 32557	PNX8537E/M2A/0F86
7H02		For SW see item 0802
7H03	9322 204 63685	NCP303LSN10
7H04	9322 204 63685	NCP303LSN10
7H14	3198 010 42310	BC847BW
7H16	3198 010 42310	BC847BW
7H18	3198 010 42310	BC847BW
7H21	3198 010 44310	PDTC114EU
7H22	3198 010 44310	PDTC114EU
7H90	9322 204 63685	NCP303LSN10
7HA0		For SW see item 0802
7HA3	3198 010 44310	PDTC114EU

7HC0	9351 750 00118	74HC4066PW
7HC1	3198 010 44310	PDTC114EU
7HC2	3198 010 44310	PDTC114EU
7HC3		For SW see item 0802
7HC4	3198 010 42320	BC857BW
7HD0	9322 204 63685	NCP303LSN10
7HD6	9340 425 20115	BC847BS
7HD8	3198 010 42310	BC847BW
7HG0	9322 235 85668	EDE2516ABSE-6E-E
7HG1	9322 235 85668	EDE2516ABSE-6E-E
7HK0	9322 144 97668	LD1117DT
7HM1	9322 185 74668	LM324P
7HP0	9322 213 38685	LD2985BM33
7HP5	9352 760 36118	PCA9540BDP
7HV0	9322 243 46668	TPA4411RTJ
7HV1	3198 010 42310	BC847BW
7HVA	9340 425 30115	BC847BPN
7J27	9322 247 52668	AD8191ASTZ
7J28	3198 010 42310	BC847BW
7J29		For SW see item 0802
7J30	9351 875 80118	74HCU04PW
7J42	9340 425 20115	BC847BS
7J50	3198 010 42320	BC857BW
7J51	5322 130 60159	BC846B
7JA0		For SW see item 0802
7JA1		For SW see item 0802
7JA2	3198 010 42310	BC847BW
7JA3	3198 010 42310	BC847BW
7JE2	9322 174 78668	ST3232C
7JE3	3198 010 42310	BC847BW
7N00	9352 805 26518	ISP1564HL
7N30	9322 247 48668	RYC8620-2M
7T06	9340 425 30115	BC847BPN
7T18	9352 797 91557	TDA10060HL/C1
7T20	9322 160 50668	LD1117DT25
7T56	3198 010 42310	BC847BW
7T57	9352 830 76118	TDA9897HL/V2
7T59	3198 010 42310	BC847BW
7U00	9322 207 46668	NCP5422AD
7U01	9322 245 62668	Power FET FDS8884
7U02	9322 160 70668	SI4936ADY
7U03	9322 245 62668	Power FET FDS8884
7U04	9340 425 20115	BC847BS
7U05	9340 425 20115	BC847BS
7U06	9322 245 62668	Power FET FDS8884
7U07	9340 219 30115	BC817-25W
7U08	9322 245 62668	Power FET FDS8884
7U10	9340 425 10115	BC857BS
7U13	9340 425 30115	BC847BPN
7U14	9340 425 20115	BC847BS
7U15	9340 425 20115	BC847BS
7U16	9322 204 71668	SI4835BDY
7U17	9322 192 16685	TS2431AI
7U18	9322 213 50685	TS431AIL
7U19	9340 219 30115	BC817-25W
7U20	9340 219 30115	BC817-25W
7U27	9322 213 50685	TS431AIL
7U28	9340 575 87118	PHD38N02LT

Small Signal Board [B] 3104 328 53752

Various

1006	2422 026 05751	Socket Cinch 3p f YeWhRd
1007	2422 026 04813	socket 4p f
1008	2422 026 05779	Socket Cinch 3p f GnBuRd
1009	2422 026 05779	Socket Cinch 3p f GnBuRd
1011	2422 026 05751	Socket Cinch 3p f YeWhRd
1060	2422 026 05966	Socket Cinch 1p f Wh
1061	2422 026 05967	Socket Cinch 1p f Rd
1735	2422 025 09406	Connector 4p m
1B01	2422 033 00552	Socket HDMI 19p f
1B02	2422 033 00552	Socket HDMI 19p f
1B03	2422 033 00552	Socket HDMI 19p f
1B32	2422 086 00717	Fuse 1.6A T 250V
1B33	2422 086 00797	Fuse 2.5A T 125V
1B40	2422 025 18779	Connector 4p m
1B50	2422 086 00791	Fuse 3A T 125V
1C00	2422 026 05539	Socket Cinch 2p f WhRd
1C01	2422 026 05539	Socket Cinch 2p f WhRd
1C03▲	2422 026 05622	Socket Cinch 2p f
1FA0	2422 025 17274	Connector 10p m
1G50	2422 025 18973	Conn. 41p f 0.5 smd
1GE1	2422 540 00017	Reson. 60MHz CSTCW
1H01	2422 025 12479	Connector 4p m
1HE2	2422 025 18738	Connector 3p m
1HF0	2422 543 01397	Xtal 27MHz 18pF
1HP0	2422 025 18738	Connector 3p m
1M15	2422 026 05703	Socket Cinch 1p f
1M20	2422 025 09407	Connector 7p m
1M36	2422 025 10655	Connector 11p m
1M59	2422 025 19265	Connector 5p m Bk
1N01	2422 543 01095	Res. 12MHz DSX840
1P02	2422 025 16374	Connector 2p m
1P11	2422 025 08151	Connector 8p m
1T04	3112 297 15361	Tuner TD1736F/FHFXP
1T06	2422 549 01546	SAW 45MHz M1867D
1T55	2422 549 01428	SAW 44MHz X6931N
1T69	2422 543 01614	Xtal 54MHz 10pF

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2B20	3198 035 01020	1nF X7R 50V 0402
2B21	3198 035 21030	10nF 16V 0402
2B22	3198 035 21030	10nF 16V 0402
2B23	3198 035 21030	10nF 16V 0402
2B24	3198 035 21030	10nF 16V 0402
2B25	3198 035 21030	10nF 16V 0402
2B26	3198 034 01010	100pF 50V 0402
2B30	2222 339 22224	220nF 20% 275V
2B32	2238 930 15625	1n5 10% 200V
2B33	3198 034 05690	56pF 1% 50V 0402
2B34	3198 034 01010	100pF 50V 0402
2B35	3198 034 01090	10pF 50V 0402
2B38	2020 552 96448	1µF 10% 16V 0805
2B39	2020 552 96448	1µF 10% 16V 0805
2B40	2020 552 96448	1µF 10% 16V 0805
2B41	2238 780 15654	220nF 10% 16V 0805
2B42	2238 780 15654	220nF 10% 16V 0805
2B43	3198 017 34730	47nF 16V 0603
2B45	2238 930 15623	1nF 10% 200V 0805
2B46	2238 930 15623	1nF 10% 200V 0805
2B47	3198 026 31020	1000µF 20% 25V
2B48	2238 930 15623	1nF 10% 200V 0805
2B49	3198 026 22220	2200µF 20% 16V
2B50	2022 020 01021	68µF 20% 450V
2B51	2238 930 15623	1nF 10% 200V 0805
2B52	2022 554 04155	470pF 20% 250V
2B53	3198 034 01010	100pF 50V 0402
2B54	3198 034 01010	100pF 50V 0402
2B55	2020 552 00291	10µF 20% 6V3 0603
2B56	3198 017 34730	47nF 16V 0603
2B57	2020 552 96448	1µF 10% 16V 0805
2B58	2020 552 96448	1µF 10% 16V 0805
2B59	2020 552 96205	470nF 10% 16V 0805
2B60	2020 558 00005	10nF 10% 630V 1206
2B61	3198 035 02220	2.2nF 50V 0402
2B62	2020 552 96448	1µF 10% 16V 0805
2B63	3198 017 31040	100nF 20% 50V 0603
2D00	3198 026 21020	1000µF 20% 16V
2D01	2020 552 96448	1µF 10% 16V 0805
2D02	3198 017 31040	100nF 20% 50V 0603
2D04	3198 034 01090	10pF 50V 0402
2D05	3198 017 31040	100nF 20% 50V 0603
2D07	3198 035 01020	1nF X7R 50V 0402
2D08	3198 035 02220	2.2nF 50V 0402
2D09	3198 035 02220	2.2nF 50V 0402
2D10	3198 035 21030	10nF 16V 0402
2D11	2020 552 96448	1µF 10% 16V 0805
2D12	3198 034 01090	10pF 50V 0402
2D13	3198 034 02290	22pF 50V 0402
2D14	3198 034 02290	22pF 50V 0402
2D15	3198 017 31040	100nF 20% 50V 0603
2D17	3198 035 01020	1nF X7R 50V 0402
2D18	2020 552 96205	470nF 10% 16V 0805
2D19	3198 035 02220	2.2nF 50V 0402
2D20	2020 552 96205	470nF 10% 16V 0805
2D21	3198 035 21030	10nF 16V 0402
2D22	3198 035 02220	2.2nF 50V 0402
2D23	3198 035 02220	2.2nF 50V 0402
2D24	3198 026 44710	470µF 20% 35V
2D25	3198 017 31040	100nF 20% 50V 0603
2D26	2020 552 96448	1µF 10% 16V 0805
2D27	3198 035 21030	10nF 16V 0402
2D28	2020 552 96448	1µF 10% 16V 0805
2D29	3198 026 21020	1000µF 20% 16V
2D30	2238 916 11552	1.5nF 5% 25V 0603
2D31	2238 916 11552	1.5nF 5% 25V 0603
2D32	2020 552 96448	1µF 10% 16V 0805
2D33	2238 916 11552	1.5nF 5% 25V 0603
2D34	2238 916 11552	1.5nF 5% 25V 0603
2D35	2020 552 96448	1µF 10% 16V 0805
2D36	3198 017 31040	100nF 20% 50V 0603
2D37	3198 017 31040	100nF 20% 50V 0603
2D39	3198 026 44710	470µF 20% 35V
2D40	3198 035 02220	2.2nF 50V 0402
2D44	3198 034 01090	10pF 50V 0402
2D72	2020 552 96448	1µF 10% 16V 0805
2D73	2020 552 00291	10µF 20% 6V3 0603
2D74	3198 021 90030	Jumper 0603

2E06	3198 034 01010	100pF 50V 0402
2E07	3198 034 01010	100pF 50V 0402
2E14	3198 034 01010	100pF 50V 0402
2E15	3198 034 01010	100pF 50V 0402
2E16	3198 017 31040	100nF 20% 50V 0603
2E17	3198 017 31040	100nF 20% 50V 0603
2E20	3198 034 01010	100pF 50V 0402
2E21	3198 034 01010	100pF 50V 0402
2E26	3198 034 01010	100pF 50V 0402
2E27	3198 034 01010	100pF 50V 0402
2E28	3198 034 01010	100pF 50V 0402
2E32	3198 034 01010	100pF 50V 0402
2E33	3198 034 01010	100pF 50V 0402
2E34	3198 034 01010	100pF 50V 0402
2E35	3198 034 01010	100pF 50V 0402
2E36	3198 034 01010	100pF 50V 0402
2E37	3198 034 01010	100pF 50V 0402
2E90	3198 034 01010	100pF 50V 0402
2E91	3198 034 01010	100pF 50V 0402
2E92	3198 035 01020	1nF X7R 50V 0402
2E93	3198 035 01020	1nF X7R 50V 0402
2E94	3198 034 01010	100pF 50V 0402
2E95	3198 034 01010	100pF 50V 0402
2FA0	3198 027 81080	1uF 6.3V 0402
2FA1	3198 035 21030	10nF 16V 0402
2FA2	3198 035 21030	10nF 16V 0402
2FA3	3198 035 21030	10nF 16V 0402
2FA4	3198 035 21030	10nF 16V 0402
2FA5	3198 017 31040	100nF 20% 50V 0603
2FA6	3198 027 81080	1uF 6.3V 0402
2FA7	3198 035 21030	10nF 16V 0402
2FA8	3198 017 31040	100nF 20% 50V 0603
2FA9	2020 552 00027	4.7µF 2% 6.3V 0603
2FB0	3198 027 81080	1uF 6.3V 0402
2FB1	3198 035 21030	10nF 16V 0402
2FB2	3198 035 21030	10nF 16V 0402
2FB3	3198 035 21030	10nF 16V 0402
2FB4	3198 035 21030	10nF 16V 0402
2FB5	3198 035 21030	10nF 16V 0402
2FB6	3198 035 21030	10nF 16V 0402
2FB7	3198 035 21030	10nF 16V 0402
2FB9	2020 552 00027	4.7µF 2% 6.3V 0603
2FC0	2020 021 00215	220µF 20% 25V
2FC2	3198 027 81080	1uF 6.3V 0402
2FD0	3198 027 81080	1uF 6.3V 0402
2FD1	3198 035 21030	10nF 16V 0402
2FD2	3198 035 21030	10nF 16V 0402
2FD3	3198 035 21030	10nF 16V 0402
2FD4	3198 035 21030	10nF 16V 0402
2FD5	3198 035 21030	10nF 16V 0402
2FD6	3198 035 21030	10nF 16V 0402
2FD7	3198 035 21030	10nF 16V 0402
2FD8	3198 035 21030	10nF 16V 0402
2FD9	3198 035 21030	10nF 16V 0402
2FE0	2020 552 00027	4.7µF 2% 6.3V 0603
2FE1	3198 035 21030	10nF 16V 0402
2FE2	3198 035 21030	10nF 16V 0402
2FE3	3198 035 21030	10nF 16V 0402
2FE4	3198 035 21030	10nF 16V 0402
2FE5	3198 035 21030	10nF 16V 0402
2FE6	3198 035 21030	10nF 16V 0402
2FE7	3198 035 21030	10nF 16V 0402
2FF0	3198 027 81080	1uF 6.3V 0402
2FF1	3198 035 21030	10nF 16V 0402
2FF2	3198 035 21030	10nF 16V 0402
2FF3	3198 035 21030	10nF 16V 0402
2FF4	3198 035 21030	10nF 16V 0402
2FF6	3198 035 21030	10nF 16V 0402
2FF7	3198 035 21030	10nF 16V 0402
2G00	3198 034 04780	4.7pF 50V NP0 0402
2G01	3198 034 04780	4.7pF 50V NP0 0402
2G02	3198 034 04780	4.7pF 50V NP0 0402
2G03	3198 034 04780	4.7pF 50V NP0 0402
2G04	3198 034 04780	4.7pF 50V NP0 0402
2G05	3198 034 04780	4.7pF 50V NP0 0402
2G06	3198 034 04780	4.7pF 50V NP0 0402
2G07	3198 034 04780	4.7pF 50V NP0 0402
2G08	3198 034 04780	4.7pF 50V NP0 0402
2G09	3198 034 04780	4.7pF 50V NP0 0402
2G10	3198 034 04780	4.7pF 50V NP0 0402
2G11	3198 034 04780	4.7pF 50V NP0 0402
2G12	3198 034 04780	4.7pF 50V NP0 0402
2G13	3198 034 04780	4.7pF 50V NP0 0402
2G14	3198 034 04780	4.7pF 50V NP0 0402
2G15	3198 034 04780	4.7pF 50V NP0 0402
2G16	3198 034 04780	4.7pF 50V NP0 0402
2G17	3198 034 04780	4.7pF 50V NP0 0402
2G18	3198 034 04780	4.7pF 50V NP0 0402
2G19	3198 034 04780	4.7pF 50V NP0 0402
2G20	3198 034 04780	4.7pF 50V NP0 0402
2G21	3198 034 04780	4.7pF 50V NP0 0402
2G22	3198 034 04780	4.7pF 50V NP0 0402
2G23	3198 034 04780	4.7pF 50V NP0 0402
2G52	3198 034 01010	100pF 50V 0402

2G53	3198 034 01010	100pF 50V 0402
2G54	3198 017 31040	100nF 20% 50V 0603
2G60	3198 017 31040	100nF 20% 50V 0603
2G63	3198 031 01020	1kΩ 5% 0402
2G67	3198 035 04710	470pF 50V 0402
2G68	3198 035 04710	470pF 50V 0402
2G78	3198 035 04710	470pF 50V 0402
2GE0	3198 027 81080	1uF 6.3V 0402
2GE1	3198 035 21030	10nF 16V 0402
2GE2	3198 035 21030	10nF 16V 0402
2GE3	3198 035 21030	10nF 16V 0402
2GE4	3198 035 21030	10nF 16V 0402
2GE5	3198 035 21030	10nF 16V 0402
2GE6	3198 035 21030	10nF 16V 0402
2GE7	3198 035 21030	10nF 16V 0402
2GE8	3198 035 21030	10nF 16V 0402
2GE9	3198 035 21030	10nF 16V 0402
2GF0	3198 035 21030	10nF 16V 0402
2GF1	3198 035 21030	10nF 16V 0402
2GF2	3198 035 21030	10nF 16V 0402
2GF3	3198 035 21030	10nF 16V 0402
2GF4	2020 552 00027	4.7µF 2% 6.3V 0603
2GF5	3198 035 21030	10nF 16V 0402
2GF6	3198 035 21030	10nF 16V 0402
2GF7	3198 035 21030	10nF 16V 0402
2GF8	3198 035 21030	10nF 16V 0402
2GF9	3198 035 21030	10nF 16V 0402
2GG0	3198 027 81080	1uF 6.3V 0402
2GG1	3198 035 21030	10nF 16V 0402
2GG2	3198 035 21030	10nF 16V 0402
2GG3	3198 027 81080	1uF 6.3V 0402
2GG4	3198 035 21030	10nF 16V 0402
2GG5	3198 035 21030	10nF 16V 0402
2GG6	3198 035 21030	10nF 16V 0402
2GG7	3198 027 81080	1uF 6.3V 0402
2GG8	3198 035 21030	10nF 16V 0402
2GG9	3198 035 21030	10nF 16V 0402
2GH0	3198 035 21030	10nF 16V 0402
2GH1	3198 027 81080	1uF 6.3V 0402
2GH2	3198 035 21030	10nF 16V 0402
2GH3	3198 035 21030	10nF 16V 0402
2GH4	3198 035 21030	10nF 16V 0402
2GH5	3198 035 21030	10nF 16V 0402
2GH6	3198 027 81080	1uF 6.3V 0402
2GH7	3198 035 21030	10nF 16V 0402
2GH8	3198 035 21030	10nF 16V 0402
2GH9	3198 035 21030	10nF 16V 0402
2GJ0	2020 552 00027	4.7µF 2% 6.3V 0603
2GJ5	3198 017 31040	100nF 20% 50V 0603
2GJ6	3198 027 81080	1uF 6.3V 0402
2GJ7	3198 035 21030	10nF 16V 0402
2GK0	3198 017 31040	100nF 20% 50V 0603
2GK1	3198 017 31040	100nF 20% 50V 0603
2GK2	3198 030 14790	47µF 20% 4V
2GK3	3198 027 81080	1uF 6.3V 0402
2GK4	3198 035 21030	10nF 16V 0402
2GK5	3198 035 21030	10nF 16V 0402
2GK6	3198 035 21030	10nF 16V 0402
2GL1	3198 035 21030	10nF 16V 0402
2H00	3198 035 01020	1nF X7R 50V 0402
2H01	3198 017 31040	100nF 20% 50V 0603
2H05	3198 017 31040	100nF 20% 50V 0603
2H06	3198 034 01010	100pF 50V 0402
2H07	3198 034 01010	100pF 50V 0402
2H08	3198 017 31040	100nF 20% 50V 0603
2H10	3198 017 31040	100nF 20% 50V 0603
2H90	3198 017 31040	100nF 20% 50V 0603
2HA0	3198 017 31040	100nF 20% 50V 0603
2HA1	3198 017 31040	100nF 20% 50V 0603
2HA2	2238 787 15641	22nF 5% 16V 0402
2HA3	2238 787 15641	22nF 5% 16V 0402
2HA4	2238 787 15641	22nF 5% 16V 0402
2HA5	2238 787 15641	22nF 5% 16V 0402
2HC0	3198 017 31040	100nF 20% 50V 0603
2HC1	3198 017 31040	100nF 20% 50V 0603
2HD0	3198 017 31040	100nF 20% 50V 0603
2HF0	3198 034 02790	47pF 1% 50V 0402
2HF1	3198 034 02790	47pF 1% 50V 0402
2HF2	3198 017 31040	100nF 20% 50V 0603
2HG0	3198 017 31040	100nF 20% 50V 0603
2HG1	3198 017 31040	100nF 20% 50V 0603
2HG2	3198 017 31040	100nF 20% 50V 0603
2HG3	3198 017 31040	100nF 20% 50V 0603
2HG4	3198 017 31040	100nF 20% 50V 0603
2HG5	3198 017 31040	100nF 20% 50V 0603
2HG6	3198 017 31040	100nF 20% 50V 0603
2HG7	3198 017 31040	100nF 20% 50V 0603
2HG8	3198 017 31040	100nF 20% 50V 0603
2HG9	3198 017 31040	100nF 20% 50V 0603
2HGA	3198 017 31040	100nF 20% 50V 0603
2HGB	3198 017 31040	100nF 20% 50V 0603
2HGC	3198 017 31040	100nF 20% 50V 0603
2HGD	3198 017 31040	100nF 20% 50V 0603
2HGE	3198 017 31040	100nF 20% 50V 0603
2HGF	3198 017 31040	100nF 20% 50V 0603
2HGG	3198 027 02290	Jumper 0603
2HGH	3198 017 31040	100nF 20% 50V 0603
2HGJ	3198 017 31040	100nF 20% 50V 0603
2HGK	3198 017 31040	100nF 20% 50V 0603
2HGM	3198 017 31040	100nF 20% 50V 0603
2HGN	3198 017 31040	100nF 20% 50V 0603
2HGP	3198 017 31040	100nF 20% 50V 0603
2HGR	3198 017 31040	100nF 20% 50V 0603
2HGS	3198 017 31040	100nF 20% 50V 0603
2HGT	3198 017 31040	100nF 20% 50V 0603
2HGU	3198 017 31040	100nF 20% 50V 0603
2HGV	3198 017 31040	100nF 20% 50V 0603
2HGW	3198 017 31040	100nF 20% 50V 0603
2HGY	3198 017 31040	100nF 20% 50V 0603
2HGZ	3198 017 31040	100nF 20% 50V 0603
2HH0	3198 017 31040	100nF 20% 50V 0603
2HH1	3198 017 31040	100nF 20% 50V 0603
2HH2	3198 027 02290	Jumper 0603
2HH3	3198 017 31040	100nF 20% 50V 0603
2HH4	3198 017 31040	100nF 20% 50V 0603
2HH5	3198 017 31040	100nF 20% 50V 0603
2HH6	3198 017 31040	100nF 20% 50V 0603
2HH7	3198 017 31040	100nF 20% 50V 0603
2HH8	3198 017 31040	100nF 20% 50V 0603
2HH9	3198 017 31040	100nF 20% 50V 0603
2HHA	3198 017 31040	100nF 20% 50V 0603
2HHM	2020 552 96448	1µF 10% 16V 0805
2HHP	2020 552 96448	1µF 10% 16V 0805
2HK0	3198 030 14790	47µF 20% 4V
2HK1	3198 017 31040	100nF 20% 50V 0603
2HK2	3198 017 31040	100nF 20% 50V 0603
2HK3	3198 030 14790	47µF 20% 4V
2HK4	3198 017 31040	100nF 20% 50V 0603
2HK5	3198 017 31040	100nF 20% 50V 0603
2HK6	3198 017 31040	100nF 20% 50V 0603
2HK7	2020 552 96448	1µF 10% 16V 0805
2HK8	3198 017 31040	100nF 20% 50V 0603
2HK9	3198 030 14790	47µF 20% 4V
2HKA	2020 004 00003	330µF 20% 6.3V
2HKB	2020 552 00291	10µF 20% 6V3 0603
2HKL	2020 552 00217	270pF 5% 50V 0402
2HM3	3198 035 03320	3.3nF 5% 50V 0402
2HM8	3198 035 03320	3.3nF 5% 50V 0402
2HMG	2020 552 96448	1µF 10% 16V 0805
2HMH	2020 552 96448	1µF 10% 16V 0805
2HMJ	3198 017 31040	100nF 20% 50V 0603
2HMN	3198 017 31040	100nF 20% 50V 0603
2HMP	3198 034 03390	33pF 50V 0402
2HMT	3198 034 03390	33pF 50V 0402
2HMW	3198 034 03390	33pF 50V 0402
2HMY	3198 035 03320	3.3nF 5% 50V 0402
2HMZ	3198 034 03390	33pF 50V 0402
2HN1	3198 035 03320	3.3nF 5% 50V 0402
2HP1	3198 034 01010	100pF 50V 0402
2HP4	2020 552 00291	10µF 20% 6V3 0603
2HP5	3198 017 31040	100nF 20% 50V 0603
2HP6	3198 017 31040	100nF 20% 50V 0603
2HP7	3198 017 31040	100nF 20% 50V 0603
2HP8	3198 017 31040	100nF 20% 50V 0603
2HPA	2020 552 00291	10µF 20% 6V3 0603
2HPB	3198 035 21030	10nF 16V 0402
2HR1	2020 552 96448	1µF 10% 16V 0805
2HR3	2020 552 96448	1µF 10% 16V 0805
2HR5	2020 552 96448	1µF 10% 16V 0805
2HR7	2020 552 96448	1µF 10% 16V 0805
2HR9	2020 552 96448	1µF 10% 16V 0805
2HRB	2020 552 96448	1µF 10% 16V 0805
2HRD	2020 552 96448	1µF 10% 16V 0805
2HRF	2020 552 96448	1µF 10% 16V 0805
2HRH	2020 552 96448	1µF 10% 16V 0805
2HRK	2020 552 96448	1µF 10% 16V 0805
2HRM	3198 017 31040	100nF 20% 50V 0603
2HRN	3198 017 31040	100nF 20% 50V 0603
2HRP	2020 552 00291	10µF 20% 6V3 0603
2HRS	3198 035 03320	3.3nF 5% 50V 0402
2HRT	3198 035 03320	3.3nF 5% 50V 0402
2HRU	3198 017 31040	100nF 20% 50V 0603
2HRV	3198 017 31040	100nF 20% 50V 0603
2HRW	3198 017 31040	100nF 20% 50V 0603
2HRY	2020 552 00291	10µF 20% 6V3 0603
2HRZ	2238 787 15641	22nF 5% 16V 0402
2HS0	2238 787 15641	22nF 5% 16V 0402
2HS1	2238 787 15641	22nF 5% 16V 0402
2HS2	3198 034 01010	100pF 50V 0402
2HS3	3198 034 01010	100pF 50V 0402
2HS4	2238 787 15641	22nF 5% 16V 0402
2HS5	3198 035 03310	330pF 5% 50V 0402
2HS6	3198 035 03310	330pF 5% 50V 0402
2HS7	2238 787 15641	22nF 5% 16V 0402
2HS8	3198 034 01010	100pF 50V 0402
2HS9	3198 034 01010	100pF 50V 0402
2HSA	2238 787 15641	22nF 5% 16V 0402
2HSB	2238 787 15641	22nF 5% 16V 0402
2HSC	2238 787 15641	22nF 5% 16V 0402
2HSD	3198 034 01010	100pF 50V 0402
2HSE	3198 034 01010	100pF 50V 0402
2HSF	2238 787 15641	22nF 5% 16V 0402
2HSG	3198 035 03310	330pF 5% 50V 0402
2HSH	3198 035 03310	330pF 5% 50V 0402
2HSJ	2238 787 15641	22nF 5% 16V 0402
2HSK	3198 034 01010	100pF 50V 0402
2HSM	3198 034 01010	100pF 50V 0402
2HSN	2238 787 15641	22nF 5% 16V 0402
2HSP	2238 787 15641	22nF 5% 16V 0402
2HSR	3198 017 31040	100nF 20% 50V 0603
2HSS	3198 017 31040	100nF 20% 50V 0603
2HST	2238 787 15641	22nF 5% 16V 0402
2HSU	3198 034 01290	12pF 1% 50V 0402
2HSV	2238 787 15641	22nF 5% 16V 0402
2HSW	2238 787 15641	22nF 5% 16V 0402
2HSY	2238 787 15641	22nF 5% 16V 0402
2HSZ	3198 017 31040	100nF 20% 50V 0603
2HT0	2238 787 15641	22nF 5% 16V 0402
2HT1	3198 030 41090	10µF 20% 16V
2HT2	3198 017 31040	100nF 20% 50V 0603
2HT3	2238 787 15641	22nF 5% 16V 0402
2HT4	3198 030 41090	10µF 20% 16V
2HT5	2238 787 15641	22nF 5% 16V 0402
2HT6	2238 787 15641	22nF 5% 16V 0402
2HT7	2238 787 15641	22nF 5% 16V 0402
2HT8	2238 787 15641	22nF 5% 16V 0402
2HT9	3198 034 01510	150pF 1% 50V 0402
2HTA	3198 034 08290	82pF 50V 0402
2HTB	2238 787 15641	22nF 5% 16V 0402
2HTE	2238 787 15641	22nF 5% 16V 0402
2HTH	2238 787 15641	22nF 5% 16V 0402
2HTK	2238 787 15641	22nF 5% 16V 0402
2HTP	3198 034 01010	100pF 50V 0402
2HTR	3198 034 01010	100pF 50V 0402
2HTS	3198 035 03310	330pF 5% 50V 0402
2HTT	3198 035 03310	330pF 5% 50V 0402
2HTU	3198 034 01010	100pF 50V 0402
2HTV	3198 034 01010	100pF 50V 0402
2HU1	3198 034 01510	150pF 1% 50V 0402
2HU2	3198 034 08290	82pF 50V 0402
2HU5	2238 787 15641	22nF 5% 16V 0402
2HU8	2238 787 15641	22nF 5% 16V 0402
2HUB	2238 787 15641	22nF 5% 16V 0402
2HUC	3198 035 03310	330pF 5% 50V 0402
2HUD	3198 035 03310	330pF 5% 50V 0402
2HUK	2020 552 00217	270pF 5% 50V 0402
2HUN	2238 787 15641	22nF 5% 16V 0402
2HUP	2238 787 15641	22nF 5% 16V 0402
2HV2	3198 035 01020	1nF X7R 50V 0402
2HV3	2020 552 00291	10µF 20% 6V3 0603
2HV4	3198 035 01020	1nF X7R 50V 0402
2HV6	3198 035 03320	3.3nF 5% 50V 0402
2HV7	3198 017 31040	100nF 20% 50V 0603
2HV9	2020 552 00291	10µF 20% 6V3 0603
2HVA	3198 035 03320	3.3nF 5% 50V 0402
2HVB	2020 552 00291	10µF 20% 6V3 0603
2HVC	3198 017 31040	100nF 20% 50V 0603
2HVD	2020 552 96448	1µF 10% 16V 0805
2HVE	2020 552 96448	1µF 10% 16V 0805
2HVG	3198 035 01020	1nF X7R 50V 0402
2HY0	3198 017 31040	100nF 20% 50V 0603
2HY1	3198 017 31040	100nF 20% 50V 0603
2HY2	3198 017 31040	100nF 20% 50V 0603
2HY3	2020 552 96448	1µF 10% 16V 0805
2HY4	3198 017 31040	100nF 20% 50V 0603
2HY5	2020 552 96448	1µF 10% 16V 0805
2HY6	3198 017 31040	100nF 20% 50V 0603
2HY7	2020 552 96448	1µF 10% 16V 0805
2HY8	3198 017 31040	100nF 20% 50V 0603
2HY9	2020 552 96448	1µF 10% 16V 0805
2HYA	3198 017 31040	100nF 20% 50V 0603
2HYB	2020 552 96448	1µF 10% 16V 0805
2HYC	2020 552 00291	10µF 20% 6V3 0603
2HYD	2020 552 00291	10µF 20% 6V3 0603
2HYE	2020 552 00291	10µF 20% 6V3 0603
2HYF	2020 552 00291	10µF 20% 6V3 0603
2HYG	3198 017 31040	100nF 20% 50V 0603
2HYH	3198 017 31040	100nF 20% 50V 0603
2HYJ	3198 017 31040	100nF 20% 50V 0603
2HYK	3198 017 31040	100nF 20% 50V 0603
2HYM	3198 017 31040	100nF 20% 50V 0603
2HYN	3198 017 31040	100nF 20% 50V 0603
2HYP	3198 017 31040	100nF 20% 50V 0603
2HYR	3198 017 31040	100nF 20% 50V 0603
2HYS	2020 552 96448	1µF 10% 16V 0805
2HYT	2020 552 96448	1µF 10% 16V 0805
2HYU	2020 552 96448	1µF 10% 16V 0805
2HYV	2020 552 96448	1µF 10% 16V 0805
2HYW	3198 017 31040	100nF 20% 50V 0603
2HYY	3198 017 31040	100nF 20% 50V 0603
2HYZ	3198 017 31040	100nF 20% 50V 0603
2HZ0	3198 017 31040	100nF 20% 50V 0603

2HZ1	3198 017 31040	100nF 20% 50V 0603
2HZ2	2020 552 96448	1µF 10% 16V 0805
2HZ3	3198 017 31040	100nF 20% 50V 0603
2HZ4	3198 017 31040	100nF 20% 50V 0603
2HZ7	2020 552 96448	1µF 10% 16V 0805
2HZ8	3198 017 31040	100nF 20% 50V 0603
2HZ9	3198 017 31040	100nF 20% 50V 0603
2HZA	3198 017 31040	100nF 20% 50V 0603
2HZB	2020 552 96448	1µF 10% 16V 0805
2HZC	2020 552 96448	1µF 10% 16V 0805
2HZD	3198 017 31030	10nF 20% 50V 0603
2HZE	3198 017 31030	10nF 20% 50V 0603
2HZF	3198 017 31030	10nF 20% 50V 0603
2HZG	3198 017 31030	10nF 20% 50V 0603
2HZH	3198 017 31040	100nF 20% 50V 0603
2HZJ	2020 552 96448	1µF 10% 16V 0805
2HZN	3198 017 31040	100nF 20% 50V 0603
2HZP	3198 017 31040	100nF 20% 50V 0603
2HZR	3198 017 31040	100nF 20% 50V 0603
2HZS	3198 017 31040	100nF 20% 50V 0603
2HZT	2020 552 96448	1µF 10% 16V 0805
2HZU	2020 552 96448	1µF 10% 16V 0805
2HZV	3198 017 31040	100nF 20% 50V 0603
2J11	3198 034 01010	100pF 50V 0402
2J12	3198 034 01010	100pF 50V 0402
2J15	3198 034 01010	100pF 50V 0402
2J16	3198 034 01010	100pF 50V 0402
2J20	3198 034 01010	100pF 50V 0402
2J30	3198 035 01020	1nF X7R 50V 0402
2J31	3198 017 31040	100nF 20% 50V 0603
2J32	2020 552 00291	10µF 20% 6V3 0603
2J33	3198 017 31040	100nF 20% 50V 0603
2J34	3198 017 31040	100nF 20% 50V 0603
2J42	3198 034 02290	22pF 50V 0402
2J49	3198 034 02290	22pF 50V 0402
2J61	2020 552 96448	1µF 10% 16V 0805
2J62	3198 034 01010	100pF 50V 0402
2J65	2020 552 96448	1µF 10% 16V 0805
2J66	3198 034 01010	100pF 50V 0402
2JA0	3198 017 31040	100nF 20% 50V 0603
2JA1	3198 017 31040	100nF 20% 50V 0603
2JA2	3198 017 31040	100nF 20% 50V 0603
2JA3	3198 017 31040	100nF 20% 50V 0603
2JA4	3198 035 21030	10nF 16V 0402
2JA5	3198 035 21030	10nF 16V 0402
2JA6	3198 035 14720	4.7nF 5% 25V 0402
2JA7	3198 035 14720	4.7nF 5% 25V 0402
2JA8	3198 027 01090	10µF 6.3V 0805
2JA9	3198 017 31040	100nF 20% 50V 0603
2JB0	3198 035 01020	1nF X7R 50V 0402
2JB1	3198 027 01090	10µF 6.3V 0805
2JB2	3198 017 31040	100nF 20% 50V 0603
2JB3	3198 017 31040	100nF 20% 50V 0603
2JB4	3198 017 31040	100nF 20% 50V 0603
2JB5	3198 017 31040	100nF 20% 50V 0603
2JB6	3198 035 01020	1nF X7R 50V 0402
2JB7	3198 035 01020	1nF X7R 50V 0402
2JB8	3198 035 01020	1nF X7R 50V 0402
2JB9	3198 035 01020	1nF X7R 50V 0402
2JC0	3198 017 31040	100nF 20% 50V 0603
2JC1	3198 035 01020	1nF X7R 50V 0402
2JE1	3198 017 31040	100nF 20% 50V 0603
2JE2	3198 017 31040	100nF 20% 50V 0603
2JE3	3198 017 31040	100nF 20% 50V 0603
2JE4	3198 017 31040	100nF 20% 50V 0603
2JE5	3198 017 31040	100nF 20% 50V 0603
2JE6	3198 017 31040	100nF 20% 50V 0603
2JE7	3198 035 01020	1nF X7R 50V 0402
2JE8	3198 017 31040	100nF 20% 50V 0603
2JE9	3198 017 31040	100nF 20% 50V 0603
2JF0	3198 035 01020	1nF X7R 50V 0402
2JF1	3198 035 01020	1nF X7R 50V 0402
2JG1	3198 017 31040	100nF 20% 50V 0603
2JG2	3198 017 31040	100nF 20% 50V 0603
2JG3	3198 035 14720	4.7nF 5% 25V 0402
2N04	3198 017 31040	100nF 20% 50V 0603
2N05	3198 017 31040	100nF 20% 50V 0603
2N06	3198 017 31040	100nF 20% 50V 0603
2N07	3198 017 31040	100nF 20% 50V 0603
2N08	3198 017 31040	100nF 20% 50V 0603
2N09	3198 017 31040	100nF 20% 50V 0603
2N10	3198 017 31040	100nF 20% 50V 0603
2N11	3198 017 31040	100nF 20% 50V 0603
2N12	3198 017 31040	100nF 20% 50V 0603
2N13	3198 017 31040	100nF 20% 50V 0603
2N14	3198 017 31040	100nF 20% 50V 0603
2N15	3198 017 31040	100nF 20% 50V 0603
2N16	3198 017 31040	100nF 20% 50V 0603
2N17	3198 017 31040	100nF 20% 50V 0603
2N18	3198 017 31040	100nF 20% 50V 0603
2N19	3198 032 24150	22µF 20% 6.3V
2N20	3198 032 24150	22µF 20% 6.3V
2N21	3198 017 31040	100nF 20% 50V 0603
2N22	3198 034 02790	47pF 1% 50V 0402
2N23	3198 034 02790	47pF 1% 50V 0402
2N25	2020 552 00031	100nF 10% 16V
2N30	3198 017 31040	100nF 20% 50V 0603
2N31	2020 021 00215	220µF 20% 25V
2N32	3198 030 24790	1uF 5% 10V 0603
2N51	3198 034 01010	100pF 50V 0402
2N52	3198 034 01010	100pF 50V 0402
2N53	3198 034 01010	100pF 50V 0402
2N54	3198 034 01010	100pF 50V 0402
2N55	3198 034 01010	100pF 50V 0402
2N56	3198 034 01010	100pF 50V 0402
2T03	3198 034 08280	8.2pF 50V
2T04	3198 034 08280	8.2pF 50V
2T05	3198 035 21030	10nF 16V 0402
2T06	2238 787 15641	22nF 5% 16V 0402
2T07	3198 035 21030	10nF 16V 0402
2T08	3198 035 21030	10nF 16V 0402
2T09	3198 035 21030	10nF 16V 0402
2T10	3198 035 21030	10nF 16V 0402
2T11	3198 035 21030	10nF 16V 0402
2T12	3198 017 31040	100nF 20% 50V 0603
2T13	3198 017 31040	100nF 20% 50V 0603
2T14	3198 017 31040	100nF 20% 50V 0603
2T15	3198 017 31040	100nF 20% 50V 0603
2T16	3198 017 31040	100nF 20% 50V 0603
2T17	3198 017 31040	100nF 20% 50V 0603
2T18	3198 017 31040	100nF 20% 50V 0603
2T19	3198 017 31040	100nF 20% 50V 0603
2T20	3198 017 31040	100nF 20% 50V 0603
2T21	3198 017 31040	100nF 20% 50V 0603
2T22	3198 017 31040	100nF 20% 50V 0603
2T23	3198 017 31040	100nF 20% 50V 0603
2T24	3198 017 31040	100nF 20% 50V 0603
2T25	3198 017 31040	100nF 20% 50V 0603
2T26	3198 017 31040	100nF 20% 50V 0603
2T27	3198 034 01590	15pF 1% 50V 0402
2T28	3198 034 01590	15pF 1% 50V 0402
2T29	3198 017 31040	100nF 20% 50V 0603
2T30	3198 035 21030	10nF 16V 0402
2T31	3198 034 03380	3.3pF 1% 50V 0402
2T32	3198 017 31040	100nF 20% 50V 0603
2T33	3198 017 31040	100nF 20% 50V 0603
2T34	2020 552 00152	1µF 10% 6.3V 0402
2T35	3198 035 21030	10nF 16V 0402
2T36	3198 035 21030	10nF 16V 0402
2T37	3198 017 31040	100nF 20% 50V 0603
2T51	3198 035 21030	10nF 16V 0402
2T53	3198 035 21030	10nF 16V 0402
2T59	3198 034 01510	150pF 1% 50V 0402
2T61	3198 017 31040	100nF 20% 50V 0603
2T62	3198 017 31040	100nF 20% 50V 0603
2T63	3198 017 31040	100nF 20% 50V 0603
2T64	3198 027 02290	Jumper 0603
2T75	3198 035 21030	10nF 16V 0402
2T80	2238 780 15654	220nF 10% 16V 0805
2T81	3198 034 04790	27pF 1% 50V 0402
2T82	3198 035 02220	2.2nF 50V 0402
2T83	3198 035 14720	4.7nF 5% 25V 0402
2T84	3198 035 21030	10nF 16V 0402
2T85	3198 035 21030	10nF 16V 0402
2T86	3198 034 03380	3.3pF 1% 50V 0402
2T87	3198 034 03380	3.3pF 1% 50V 0402
2T88	3198 035 21030	10nF 16V 0402
2T89	3198 035 21030	10nF 16V 0402
2T90	3198 035 21030	10nF 16V 0402
2T92	3198 035 01520	1.5nF 50V 0402
2T97	3198 017 31040	100nF 20% 50V 0603
2T99	3198 030 41010	100µF 20% 16V
2TA1	3198 035 21030	10nF 16V 0402
2TA2	3198 034 02290	22pF 50V 0402
2TA3	3198 034 01010	100pF 50V 0402
2TA4	3198 017 31040	100nF 20% 50V 0603
2TA5	3198 027 02290	Jumper 0603
2TB2	3198 034 01510	150pF 1% 50V 0402
2TB5	3198 035 21030	10nF 16V 0402
2TB6	3198 035 21030	10nF 16V 0402
2U00	3198 017 31040	100nF 20% 50V 0603
2U03	2020 552 00211	22µF 10% 16V 1210
2U04	3198 035 03320	3.3nF 5% 50V 0402
2U05	2020 552 96448	1µF 10% 16V 0805
2U06	2020 552 96448	1µF 10% 16V 0805
2U07	3198 017 31040	100nF 20% 50V 0603
2U08	3198 035 03320	3.3nF 5% 50V 0402
2U11	2020 552 96448	1µF 10% 16V 0805
2U12	3198 017 31040	100nF 20% 50V 0603
2U13	3198 035 01020	1nF X7R 50V 0402
2U14	3198 017 31040	100nF 20% 50V 0603
2U15	3198 035 03320	3.3nF 5% 50V 0402
2U16	3198 035 01020	1nF X7R 50V 0402
2U17	3198 017 31040	100nF 20% 50V 0603
2U18	3198 017 31040	100nF 20% 50V 0603
2U19	3198 017 31040	100nF 20% 50V 0603
2U20	3198 017 31040	100nF 20% 50V 0603
2U21	2020 552 00158	47uF 20% 6.3V 1210
2U23	3198 017 31040	100nF 20% 50V 0603
2U24	3198 035 03320	3.3nF 5% 50V 0402
2U25	2238 787 15641	22nF 5% 16V 0402
2U26	3198 017 31040	100nF 20% 50V 0603
2U27	3198 035 01020	1nF X7R 50V 0402
2U28	3198 035 01020	1nF X7R 50V 0402
2U29	2020 552 96448	1µF 10% 16V 0805
2U32	2020 552 00152	1µF 10% 6.3V 0402
2U34	3198 034 01010	100pF 50V 0402
2U36	3198 034 01010	100pF 50V 0402
2U37	3198 017 31040	100nF 20% 50V 0603
2U38	2020 552 00152	1µF 10% 6.3V 0402
2U39	2020 552 00152	1µF 10% 6.3V 0402
2U40	2020 552 00152	1µF 10% 6.3V 0402
2U41	3198 030 11010	100µF 20% 4V
2U42	3198 030 11010	100µF 20% 4V
2U43	2020 552 00152	1µF 10% 6.3V 0402
2U44	2020 552 00152	1µF 10% 6.3V 0402
2U45	3198 017 31040	100nF 20% 50V 0603
2U46	3198 017 31040	100nF 20% 50V 0603
2U47	3198 030 42290	22µF 20% 16V
2U48	3198 030 42290	22µF 20% 16V
2U49	3198 035 01020	1nF X7R 50V 0402
2U50	2020 552 00152	1µF 10% 6.3V 0402
2U51	3198 035 01020	1nF X7R 50V 0402
2U52	2020 552 00152	1µF 10% 6.3V 0402
2U93	2020 552 00211	22µF 10% 16V 1210
2U94	2020 552 00158	47uF 20% 6.3V 1210

–WW–

3B20	3198 031 01010	1Ω 5% 0402
3B21	3198 031 01010	1Ω 5% 0402
3B22	3198 031 01010	1Ω 5% 0402
3B23	3198 031 01010	1Ω 5% 0402
3B26	3198 031 01010	1Ω 5% 0402
3B29	3198 031 04790	47Ω 5% 0402
3B30	3198 031 01020	1kΩ 5% 0402
3B31	3198 031 01020	1kΩ 5% 0402
3B32	3198 031 01020	1kΩ 5% 0402
3B33	3198 031 01020	1kΩ 5% 0402
3B34	2120 108 00372	1.5MΩ 5% 1206
3B35	3198 031 01590	15Ω 5% 0402
3B36	3198 031 04710	470Ω 5% 0402
3B37	3198 031 01020	1kΩ 5% 0402
3B38	3198 031 03910	390Ω 1% 0402
3B39	3198 031 03910	390Ω 1% 0402
3B40	3198 031 03910	390Ω 1% 0402
3B41	3198 031 03910	390Ω 1% 0402
3B42	3198 031 03910	390Ω 1% 0402
3B43	3198 031 01040	100kΩ 5% 0402
3B44	3198 031 04720	4.7kΩ 5% 0402
3B45	3198 031 03320	3.3kΩ 5% 0402
3B46	3198 031 01020	1kΩ 5% 0402
3B47	3198 031 04710	470Ω 5% 0402
3B48	3198 031 01030	10kΩ 5% 0402
3B49	2322 706 71809	18Ω 1% 0402
3B50	2322 706 76809	68Ω 1% 0402 RC32
3B51	3198 012 11080	1Ω 5% 1W
3B54	2322 706 73301	330Ω 1% 0402
3B55	3198 031 01220	1.2kΩ 5% 0.01W 0402
3B58	3198 031 01010	1Ω 5% 0402
3B59	3198 031 01010	1Ω 5% 0402
3B60	2120 108 00372	1.5MΩ 5% 1206
3B61	3198 031 01020	1kΩ 5% 0402
3B62	3198 031 01030	10kΩ 5% 0402
3B63	3198 031 02230	22kΩ 5% 0402
3B64	3198 031 01530	15kΩ 5% 0.01W 0402
3B65	3198 031 01030	10kΩ 5% 0402
3B66	3198 031 04720	4.7kΩ 5% 0402
3B67	3198 031 01020	1kΩ 5% 0402
3B68	3198 031 01020	1kΩ 5% 0402
3B69	3198 031 01020	1kΩ 5% 0402
3B70	3198 031 01020	1kΩ 5% 0402
3B71	3198 013 02210	220Ω 20% 0.5W
3B72	3198 031 02220	2.2kΩ 5% 0402
3B73	2322 706 71002	1kΩ 1% 0402
3B74	2322 706 71002	1kΩ 1% 0402
3B75	3198 031 01020	1kΩ 5% 0402
3B76	3198 031 01020	1kΩ 5% 0402
3B77	3198 031 01020	1kΩ 5% 0402
3B78	3198 031 01020	1kΩ 5% 0402
3D00	2322 762 60332	3.3kΩ 5% 2512
3D01	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D03	2350 033 11223	22kΩ 5%
3D04	2322 750 61009	Fuse 10Ω 5% 1206
3D05	3198 031 01030	10kΩ 5% 0402
3D06	3198 031 02230	22kΩ 5% 0402
3D07	3198 031 01830	18kΩ 5% 0.01W 0402
3D09	3198 031 04780	4.7Ω 5% 0402
3D10	2322 762 60332	3.3kΩ 5% 2512
3D11	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D13	2350 033 11223	22kΩ 5%

3D14	2350 033 11223	22kΩ 5%
3D15	3198 031 01050	1MΩ 5% 0402
3D16	2322 762 60331	330Ω 5% 2512
3D17	3198 031 04780	4.7Ω 5% 0402
3D18	3198 031 01030	10kΩ 5% 0402
3D19	3198 031 02230	22kΩ 5% 0402
3D20	3198 031 01830	18kΩ 5% 0.01W 0402
3D21	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D22	3198 031 01050	1MΩ 5% 0402
3D25	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D26	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D27	3198 031 03920	3.9kΩ 5% 0402
3D28	3198 031 01040	100kΩ 5% 0402
3D29	3198 031 03920	3.9kΩ 5% 0402
3D30	3198 031 01040	100kΩ 5% 0402
3D31	3198 031 01030	10kΩ 5% 0402
3D32	3198 031 01030	10kΩ 5% 0402
3D35	2322 762 60331	330Ω 5% 2512
3D37	3198 031 05610	560Ω 5% 0.01W 0402
3D38	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D39	2322 750 61009	Fuse 10Ω 5% 1206
3D40	3198 031 05610	560Ω 5% 0.01W 0402
3D55	2350 033 11223	22kΩ 5%
3D58	3198 031 04730	47Ω 5% 0402
3D61	2350 033 11223	22kΩ 5%
3D62	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D63	3198 031 02240	220kΩ 5% 0.1W 0402
3D64	3198 031 04720	4.7kΩ 5% 0402
3D71	3198 031 01220	1.2kΩ 5% 0.01W 0402
3D73	3198 031 04720	4.7kΩ 5% 0402
3D74	3198 031 03330	33kΩ 5% 0402
3D75	3198 031 06830	68kΩ 5% 0.01W 0402
3D76	2350 033 11223	22kΩ 5%
3D78	3198 031 04730	47Ω 5% 0402
3D79	3198 031 01040	100kΩ 5% 0402
3D80	3198 031 01040	100kΩ 5% 0402
3D83	3198 031 04720	4.7kΩ 5% 0402
3D89	3198 031 01040	100kΩ 5% 0402
3D90	2350 033 11223	22kΩ 5%
3E44	3198 031 90010	Jumper 0402
3E47	3198 031 01010	1Ω 5% 0402
3E48	3198 031 01040	100kΩ 5% 0402
3E52	3198 031 01010	1Ω 5% 0402
3E53	3198 031 01040	100kΩ 5% 0402
3E54	3198 031 01010	1Ω 5% 0402
3E55	3198 031 90010	Jumper 0402
3E56	3198 031 01040	100kΩ 5% 0402
3E58	3198 031 01010	1Ω 5% 0402
3E60	3198 031 90010	Jumper 0402
3E61	3198 031 01040	100kΩ 5% 0402
3E63	3198 031 01040	100kΩ 5% 0402
3E64	3198 031 01040	100kΩ 5% 0402
3E65	3198 031 01010	1Ω 5% 0402
3E66	3198 031 01010	1Ω 5% 0402
3E92	3198 031 01010	1Ω 5% 0402
3E93	3198 031 01010	1Ω 5% 0402
3F35	3198 031 02710	270Ω 5% 0.1W 0402
3F36	3198 031 01210	120Ω 5% 0.01W 0402
3F37	3198 031 02710	270Ω 5% 0.1W 0402
3F38	3198 031 02710	270Ω 5% 0.1W 0402
3F39	3198 031 01210	120Ω 5% 0.01W 0402
3F40	3198 031 02710	270Ω 5% 0.1W 0402
3F41	3198 031 02710	270Ω 5% 0.1W 0402
3F42	3198 031 01210	120Ω 5% 0.01W 0402
3F43	3198 031 02710	270Ω 5% 0.1W 0402
3F44	3198 031 02710	270Ω 5% 0.1W 0402
3F45	3198 031 01210	120Ω 5% 0.01W 0402
3F46	3198 031 02710	270Ω 5% 0.1W 0402
3F47	3198 031 02710	270Ω 5% 0.1W 0402
3F48	3198 031 01210	120Ω 5% 0.01W 0402
3F49	3198 031 02710	270Ω 5% 0.1W 0402
3F50	3198 031 02710	270Ω 5% 0.1W 0402
3F51	3198 031 01210	120Ω 5% 0.01W 0402
3F52	3198 031 02710	270Ω 5% 0.1W 0402
3F53	3198 031 02710	270Ω 5% 0.1W 0402
3F54	3198 031 01210	120Ω 5% 0.01W 0402
3F55	3198 031 02710	270Ω 5% 0.1W 0402
3F56	3198 031 02710	270Ω 5% 0.1W 0402
3F57	3198 031 01210	120Ω 5% 0.01W 0402
3F58	3198 031 02710	270Ω 5% 0.1W 0402
3F59	3198 031 02710	270Ω 5% 0.1W 0402
3F60	3198 031 01210	120Ω 5% 0.01W 0402
3F61	3198 031 02710	270Ω 5% 0.1W 0402
3F62	3198 031 02710	270Ω 5% 0.1W 0402
3F63	3198 031 01210	120Ω 5% 0.01W 0402
3F64	3198 031 02710	270Ω 5% 0.1W 0402
3F65	3198 031 02710	270Ω 5% 0.1W 0402
3F66	3198 031 01210	120Ω 5% 0.01W 0402
3F67	3198 031 02710	270Ω 5% 0.1W 0402
3F68	3198 031 02710	270Ω 5% 0.1W 0402
3F69	3198 031 01210	120Ω 5% 0.01W 0402
3F70	3198 031 02710	270Ω 5% 0.1W 0402
3F75	3198 031 04790	47Ω 5% 0402
3F76	3198 031 01030	10kΩ 5% 0402
3F93	3198 031 04790	47Ω 5% 0402
3F94	3198 031 04790	47Ω 5% 0402
3F95	3198 031 01010	1Ω 5% 0402
3F98	3198 031 01010	1Ω 5% 0402
3FA0	3198 031 03320	3.3kΩ 5% 0402
3FA1	3198 031 01030	10kΩ 5% 0402
3FA2	3198 031 01040	100kΩ 5% 0402
3FA4	3198 031 01020	1kΩ 5% 0402
3FA5	3198 031 01020	1kΩ 5% 0402
3FA6	3198 031 01010	1Ω 5% 0402
3FA7	3198 031 01010	1Ω 5% 0402
3FA8	3198 031 01010	1Ω 5% 0402
3FB2	3198 031 01030	10kΩ 5% 0402
3FB4	3198 031 03310	330Ω 5% 0402
3FB6	3198 031 03310	330Ω 5% 0402
3FB8	3198 031 01010	1Ω 5% 0402
3FB9	3198 031 01020	1kΩ 5% 0402
3FC1	3198 031 03310	330Ω 5% 0402
3FC3	3198 031 03310	330Ω 5% 0402
3FC5	3198 031 03310	330Ω 5% 0402
3FC6	3198 031 01040	100kΩ 5% 0402
3G00	3198 031 01010	1Ω 5% 0402
3G01	3198 031 01010	1Ω 5% 0402
3G02	3198 031 01010	1Ω 5% 0402
3G03	3198 031 01010	1Ω 5% 0402
3G04	3198 031 01010	1Ω 5% 0402
3G05	3198 031 01010	1Ω 5% 0402
3G06	3198 031 01010	1Ω 5% 0402
3G07	3198 031 01010	1Ω 5% 0402
3G08	3198 031 01010	1Ω 5% 0402
3G09	3198 031 01010	1Ω 5% 0402
3G10	3198 031 01010	1Ω 5% 0402
3G11	3198 031 01010	1Ω 5% 0402
3G52	3198 031 01010	1Ω 5% 0402
3G53	3198 031 01010	1Ω 5% 0402
3G55	3198 031 04730	47Ω 5% 0402
3G56	3198 031 02220	2.2kΩ 5% 0402
3G57	3198 031 01050	1MΩ 5% 0402
3G59	3198 031 04730	47Ω 5% 0402
3G62	3198 031 01030	10kΩ 5% 0402
3G63	3198 031 04790	47Ω 5% 0402
3G64	3198 031 04730	47Ω 5% 0402
3G66	3198 031 01020	1kΩ 5% 0402
3G67	3198 031 01030	10kΩ 5% 0402
3G68	3198 031 01030	10kΩ 5% 0402
3G69	3198 031 01030	10kΩ 5% 0402
3G71	3198 031 01010	1Ω 5% 0402
3G72	3198 031 04720	4.7kΩ 5% 0402
3G73	3198 031 04730	47Ω 5% 0402
3G77	3198 031 04790	47Ω 5% 0402
3G79	3198 031 01030	10kΩ 5% 0402
3G86	3198 031 04790	47Ω 5% 0402
3G92	3198 031 01030	10kΩ 5% 0402
3G95	3198 031 04720	4.7kΩ 5% 0402
3G96	3198 031 04790	47Ω 5% 0402
3GA0	3198 031 02220	2.2kΩ 5% 0402
3GA1	3198 031 01030	10kΩ 5% 0402
3GA2	3198 031 04720	4.7kΩ 5% 0402
3GA3	3198 031 02220	2.2kΩ 5% 0402
3GA4	3198 031 01030	10kΩ 5% 0402
3GA6	3198 031 90010	Jumper 0402
3GB7	3198 031 04730	47Ω 5% 0402
3GB8	3198 031 01230	12kΩ 5% 0402
3GB9	3198 031 01030	10kΩ 5% 0402
3GC0	3198 031 04720	4.7kΩ 5% 0402
3GC2	3198 031 03330	33kΩ 5% 0402
3GC3	3198 031 01020	1kΩ 5% 0402
3GC4	3198 031 90010	Jumper 0402
3GE1	3198 031 04720	4.7kΩ 5% 0402
3GE2	3198 031 04720	4.7kΩ 5% 0402
3GE3	3198 031 01050	1MΩ 5% 0402
3GE4	3198 031 04790	47Ω 5% 0402
3GE5	3198 031 04720	4.7kΩ 5% 0402
3GE6	3198 031 04720	4.7kΩ 5% 0402
3GF0	3198 031 01030	10kΩ 5% 0402
3GF1	3198 031 01020	1kΩ 5% 0402
3GF2	3198 031 04720	4.7kΩ 5% 0402
3GF3	3198 031 01010	1Ω 5% 0402
3GF4	3198 031 04720	4.7kΩ 5% 0402
3GF5	3198 031 01010	1Ω 5% 0402
3GF6	3198 031 04720	4.7kΩ 5% 0402
3GF7	3198 031 01010	1Ω 5% 0402
3GF8	3198 031 01010	1Ω 5% 0402
3GF9	3198 031 01010	1Ω 5% 0402
3GG1	3198 031 04720	4.7kΩ 5% 0402
3GG2	3198 031 01010	1Ω 5% 0402
3GG3	3198 031 01010	1Ω 5% 0402
3GH3	3198 031 01020	1kΩ 5% 0402
3GH4	3198 031 01210	120Ω 5% 0.01W 0402
3GH5	3198 031 01210	120Ω 5% 0.01W 0402
3H00	3198 031 01030	10kΩ 5% 0402
3H01	3198 031 01030	10kΩ 5% 0402
3H02	3198 031 04720	4.7kΩ 5% 0402
3H03	3198 031 04720	4.7kΩ 5% 0402
3H04	3198 031 01030	10kΩ 5% 0402
3H05	3198 031 01030	10kΩ 5% 0402
3H06	3198 031 01030	10kΩ 5% 0402
3H07	3198 031 01030	10kΩ 5% 0402
3H08	3198 031 01030	10kΩ 5% 0402
3H09	3198 031 01030	10kΩ 5% 0402
3H10	3198 031 01030	10kΩ 5% 0402
3H11	3198 031 01010	1Ω 5% 0402
3H12	3198 031 01030	10kΩ 5% 0402
3H13	3198 031 04720	4.7kΩ 5% 0402
3H14	3198 031 01030	10kΩ 5% 0402
3H15	3198 031 01030	10kΩ 5% 0402
3H16	3198 031 01030	10kΩ 5% 0402
3H17	3198 031 01030	10kΩ 5% 0402
3H19	3198 031 04720	4.7kΩ 5% 0402
3H20	3198 031 04720	4.7kΩ 5% 0402
3H21	3198 031 01030	10kΩ 5% 0402
3H23	3198 031 01030	10kΩ 5% 0402
3H24	3198 031 01030	10kΩ 5% 0402
3H26	3198 031 01030	10kΩ 5% 0402
3H27	3198 031 01030	10kΩ 5% 0402
3H28	3198 031 01030	10kΩ 5% 0402
3H30	3198 031 01030	10kΩ 5% 0402
3H31	3198 031 01030	10kΩ 5% 0402
3H32	3198 031 01030	10kΩ 5% 0402
3H35	3198 031 01010	1Ω 5% 0402
3H36	3198 031 01030	10kΩ 5% 0402
3H38	3198 031 01010	1Ω 5% 0402
3H39	3198 031 01030	10kΩ 5% 0402
3H40	3198 031 01010	1Ω 5% 0402
3H41	3198 031 01010	1Ω 5% 0402
3H42	3198 031 01030	10kΩ 5% 0402
3H43	3198 031 01010	1Ω 5% 0402
3H44	3198 031 01010	1Ω 5% 0402
3H46	3198 031 02730	27kΩ 5% 0402
3H47	3198 031 90010	Jumper 0402
3H48	3198 031 01030	10kΩ 5% 0402
3H49	3198 031 01010	1Ω 5% 0402
3H50	3198 031 01010	1Ω 5% 0402
3H51	3198 031 01030	10kΩ 5% 0402
3H52	3198 031 01010	1Ω 5% 0402
3H53	3198 031 01010	1Ω 5% 0402
3H54	3198 031 01010	1Ω 5% 0402
3H56	3198 031 01010	1Ω 5% 0402
3H57	3198 031 01010	1Ω 5% 0402
3H58	3198 031 01030	10kΩ 5% 0402
3H59	3198 031 01010	1Ω 5% 0402
3H60	3198 031 01030	10kΩ 5% 0402
3H61	3198 031 01010	1Ω 5% 0402
3H63	3198 031 01010	1Ω 5% 0402
3H64	3198 031 01030	10kΩ 5% 0402
3H65	3198 031 01010	1Ω 5% 0402
3H66	3198 031 01010	1Ω 5% 0402
3H67	3198 031 01030	10kΩ 5% 0402
3H68	3198 031 01010	1Ω 5% 0402
3H69	3198 031 01030	10kΩ 5% 0402
3H70	3198 031 06810	680Ω 5% 0.01W 0402
3H71	3198 031 01010	1Ω 5% 0402
3H72	3198 031 01010	1Ω 5% 0402
3H73	3198 031 01010	1Ω 5% 0402
3H74	3198 031 01010	1Ω 5% 0402
3H77	3198 031 01040	100kΩ 5% 0402
3H78	3198 031 01090	10Ω 5% 0.01W 0402
3H79	3198 031 06830	68kΩ 5% 0.01W 0402
3H80	3198 031 01040	100kΩ 5% 0402
3H81	3198 031 06830	68kΩ 5% 0.01W 0402
3H82	3198 031 02230	22kΩ 5% 0402
3H83	3198 031 01040	100kΩ 5% 0402
3H84	3198 031 01030	10kΩ 5% 0402
3H85	3198 031 01040	100kΩ 5% 0402
3H86	3198 031 04720	4.7kΩ 5% 0402
3H87	3198 031 06830	68kΩ 5% 0.01W 0402
3H88	3198 031 01020	1kΩ 5% 0402
3H89	3198 031 04730	47Ω 5% 0402
3H90	3198 031 02730	27kΩ 5% 0402
3H91	3198 031 02230	22kΩ 5% 0402
3H92	2322 705 70184	180Ω 5% 0402
3H93	3198 031 01030	10kΩ 5% 0402
3H95	3198 031 01030	10kΩ 5% 0402
3HA0	3198 031 01030	10kΩ 5% 0402
3HA2	3198 031 01030	10kΩ 5% 0402
3HA3	3198 031 02220	2.2kΩ 5% 0402
3HA4	3198 031 01010	1Ω 5% 0402
3HA5	3198 031 01010	1Ω 5% 0402
3HA6	3198 031 01010	1Ω 5% 0402
3HA7	3198 031 01010	1Ω 5% 0402
3HA8	3198 031 01010	1Ω 5% 0402
3HA9	3198 031 01010	1Ω 5% 0402
3HAA	3198 031 01010	1Ω 5% 0402
3HAB	3198 031 01010	1Ω 5% 0402
3HAC	3198 031 01010	1Ω 5% 0402
3HAD	3198 031 01010	1Ω 5% 0402
3HAE	3198 031 01010	1Ω 5% 0402
3HAF	3198 031 01010	1Ω 5% 0402

3HAG	3198 031 02230	22kΩ 5% 0402
3HAH	3198 031 02230	22kΩ 5% 0402
3HC0	3198 031 01030	10kΩ 5% 0402
3HC1	3198 031 01040	100kΩ 5% 0402
3HC2	3198 031 01030	10kΩ 5% 0402
3HC3	3198 031 01010	1Ω 5% 0402
3HC4	3198 031 01010	1Ω 5% 0402
3HC5	3198 031 01010	1Ω 5% 0402
3HC6	3198 031 01010	1Ω 5% 0402
3HC7	3198 031 01030	10kΩ 5% 0402
3HC8	3198 031 01030	10kΩ 5% 0402
3HC9	3198 031 01030	10kΩ 5% 0402
3HD0	3198 031 01220	1.2kΩ 5% 0.01W 0402
3HD2	3198 031 01030	10kΩ 5% 0402
3HD3	3198 031 02220	2.2kΩ 5% 0402
3HDJ	3198 031 01030	10kΩ 5% 0402
3HDK	3198 031 01030	10kΩ 5% 0402
3HDL	3198 031 01030	10kΩ 5% 0402
3HDM	3198 031 01830	18kΩ 5% 0.01W 0402
3HDN	3198 031 01020	1kΩ 5% 0402
3HDP	3198 031 03330	33kΩ 5% 0402
3HES	3198 031 01030	10kΩ 5% 0402
3HET	3198 031 01030	10kΩ 5% 0402
3HEU	3198 031 01010	1Ω 5% 0402
3HEV	3198 031 01030	10kΩ 5% 0402
3HF0	3198 031 90010	Jumper 0402
3HF1	3198 031 01010	1Ω 5% 0402
3HF2	3198 031 90010	Jumper 0402
3HF3	3198 031 01030	10kΩ 5% 0402
3HF4	3198 031 02290	22Ω 5% 0.1W 0402
3HF5	3198 031 01010	1Ω 5% 0402
3HF9	3198 031 03310	330Ω 5% 0402
3HFA	3198 031 01030	10kΩ 5% 0402
3HFB	3198 031 01030	10kΩ 5% 0402
3HFC	3198 031 01030	10kΩ 5% 0402
3HFD	3198 031 01030	10kΩ 5% 0402
3HFE	3198 031 01030	10kΩ 5% 0402
3HFF	3198 031 01030	10kΩ 5% 0402
3HFH	3198 031 02290	22Ω 5% 0.1W 0402
3HFY	3198 031 01030	10kΩ 5% 0402
3HFZ	3198 031 01030	10kΩ 5% 0402
3HG1	3198 031 03390	33Ω 1% 0402
3HG2	3198 031 03390	33Ω 1% 0402
3HG3	3198 031 03390	33Ω 1% 0402
3HG4	3198 031 03390	33Ω 1% 0402
3HG5	3198 031 03390	33Ω 1% 0402
3HG6	3198 031 03390	33Ω 1% 0402
3HG7	3198 031 03390	33Ω 1% 0402
3HG8	3198 031 03390	33Ω 1% 0402
3HG9	3198 031 03390	33Ω 1% 0402
3HGA	3198 031 03390	33Ω 1% 0402
3HGB	3198 031 03390	33Ω 1% 0402
3HGC	3198 031 03390	33Ω 1% 0402
3HGD	3198 031 03390	33Ω 1% 0402
3HGE	3198 031 03390	33Ω 1% 0402
3HGF	3198 031 03390	33Ω 1% 0402
3HGG	3198 031 03390	33Ω 1% 0402
3HGH	3198 031 03390	33Ω 1% 0402
3HGJ	3198 031 03390	33Ω 1% 0402
3HGK	3198 031 03390	33Ω 1% 0402
3HGM	3198 031 03390	33Ω 1% 0402
3HGN	3198 031 03390	33Ω 1% 0402
3HGP	3198 031 03390	33Ω 1% 0402
3HGR	3198 031 03390	33Ω 1% 0402
3HGS	3198 031 03390	33Ω 1% 0402
3HGT	3198 031 03390	33Ω 1% 0402
3HGU	3198 031 03390	33Ω 1% 0402
3HGV	3198 031 03390	33Ω 1% 0402
3HGW	3198 031 03390	33Ω 1% 0402
3HGY	3198 031 03390	33Ω 1% 0402
3HGZ	3198 031 03390	33Ω 1% 0402
3HH0	3198 031 03390	33Ω 1% 0402
3HH1	3198 031 03390	33Ω 1% 0402
3HH2	3198 031 03390	33Ω 1% 0402
3HH3	3198 031 03390	33Ω 1% 0402
3HH4	3198 031 03390	33Ω 1% 0402
3HH5	3198 031 03390	33Ω 1% 0402
3HH6	3198 031 03390	33Ω 1% 0402
3HH7	3198 031 03390	33Ω 1% 0402
3HH8	3198 031 03390	33Ω 1% 0402
3HH9	3198 031 03390	33Ω 1% 0402
3HHA	3198 031 03390	33Ω 1% 0402
3HHB	3198 031 03390	33Ω 1% 0402
3HHC	3198 031 03390	33Ω 1% 0402
3HHD	3198 031 03390	33Ω 1% 0402
3HHE	3198 031 03390	33Ω 1% 0402
3HHF	3198 031 03390	33Ω 1% 0402
3HHG	3198 031 03390	33Ω 1% 0402
3HHH	3198 031 03390	33Ω 1% 0402
3HHJ	3198 031 03390	33Ω 1% 0402
3HHK	3198 031 03390	33Ω 1% 0402
3HHM	3198 031 03390	33Ω 1% 0402
3HHN	3198 031 03390	33Ω 1% 0402
3HHP	3198 031 03390	33Ω 1% 0402
3HHR	3198 031 03390	33Ω 1% 0402
3HHS	3198 031 03390	33Ω 1% 0402
3HHT	3198 031 03390	33Ω 1% 0402
3HHU	3198 031 03390	33Ω 1% 0402
3HHV	3198 031 03390	33Ω 1% 0402
3HHW	3198 031 03390	33Ω 1% 0402
3HHY	3198 031 03390	33Ω 1% 0402
3HHZ	3198 031 03390	33Ω 1% 0402
3HJ0	3198 031 02210	220Ω 5% 0402
3HJ1	2322 706 75601	560Ω 1% 0402
3HJ2	2322 706 75601	560Ω 1% 0402
3HJ3	2322 706 75601	560Ω 1% 0402
3HJ4	2322 706 75601	560Ω 1% 0402
3HJ5	2322 706 75602	5.6kΩ 5% 0402
3HJV	3198 031 90010	Jumper 0402
3HJW	3198 031 90010	Jumper 0402
3HJY	2322 706 78201	820Ω 0402
3HJZ	3198 031 03320	3.3kΩ 5% 0402
3HK0	3198 031 01230	12kΩ 5% 0402
3HK1	3198 031 01210	120Ω 5% 0.01W 0402
3HK2	3198 031 01590	15Ω 5% 0402
3HME	3198 031 01030	10kΩ 5% 0402
3HMF	3198 031 01030	10kΩ 5% 0402
3HMG	3198 031 05620	5.6kΩ 5% 0.01W 0402
3HMH	3198 031 01030	10kΩ 5% 0402
3HMJ	3198 031 01030	10kΩ 5% 0402
3HMK	3198 031 05620	5.6kΩ 5% 0.01W 0402
3HMM	3198 031 01030	10kΩ 5% 0402
3HMN	3198 031 01030	10kΩ 5% 0402
3HMP	3198 031 05620	5.6kΩ 5% 0.01W 0402
3HMR	3198 031 01030	10kΩ 5% 0402
3HMS	3198 031 01030	10kΩ 5% 0402
3HMT	3198 031 05620	5.6kΩ 5% 0.01W 0402
3HP2	3198 031 03390	33Ω 1% 0402
3HP3	3198 031 03390	33Ω 1% 0402
3HP4	3198 031 03390	33Ω 1% 0402
3HP5	3198 031 03390	33Ω 1% 0402
3HP6	3198 031 03390	33Ω 1% 0402
3HP7	3198 031 03390	33Ω 1% 0402
3HP8	3198 031 01030	10kΩ 5% 0402
3HP9	3198 031 01230	12kΩ 5% 0402
3HPA	3198 031 01010	1Ω 5% 0402
3HPB	3198 031 01010	1Ω 5% 0402
3HPC	3198 031 04720	4.7kΩ 5% 0402
3HPD	3198 031 01010	1Ω 5% 0402
3HPE	3198 031 01010	1Ω 5% 0402
3HPF	3198 031 01010	1Ω 5% 0402
3HPG	3198 031 01010	1Ω 5% 0402
3HPH	3198 031 01010	1Ω 5% 0402
3HPJ	3198 031 01010	1Ω 5% 0402
3HPK	3198 031 02220	2.2kΩ 5% 0402
3HPM	3198 031 02220	2.2kΩ 5% 0402
3HPN	3198 031 06890	68Ω 5% 0402
3HPQ	3198 031 90010	Jumper 0402
3HPR	3198 031 90010	Jumper 0402
3HPS	3198 031 90010	Jumper 0402
3HPT	3198 031 90010	Jumper 0402
3HPU	3198 031 90010	Jumper 0402
3HPW	3198 031 90010	Jumper 0402
3HPX	3198 031 04720	4.7kΩ 5% 0402
3HPY	3198 031 04720	4.7kΩ 5% 0402
3HPZ	3198 031 04720	4.7kΩ 5% 0402
3HR0	3198 031 01230	12kΩ 5% 0402
3HR1	3198 031 02230	22kΩ 5% 0402
3HR2	3198 031 01230	12kΩ 5% 0402
3HR3	3198 031 01230	12kΩ 5% 0402
3HR4	3198 031 02230	22kΩ 5% 0402
3HR5	3198 031 01230	12kΩ 5% 0402
3HR6	3198 031 02230	22kΩ 5% 0402
3HR7	3198 031 01230	12kΩ 5% 0402
3HR8	3198 031 02230	22kΩ 5% 0402
3HR9	3198 031 01230	12kΩ 5% 0402
3HRA	3198 031 02230	22kΩ 5% 0402
3HRB	3198 031 01230	12kΩ 5% 0402
3HRC	3198 031 02230	22kΩ 5% 0402
3HRD	3198 031 01230	12kΩ 5% 0402
3HRE	3198 031 02230	22kΩ 5% 0402
3HRF	3198 031 01230	12kΩ 5% 0402
3HRG	3198 031 02230	22kΩ 5% 0402
3HRH	3198 031 01230	12kΩ 5% 0402
3HRJ	3198 031 02230	22kΩ 5% 0402
3HRK	3198 031 07590	75Ω 5% 0402
3HRM	3198 031 04720	4.7kΩ 5% 0402
3HRN	3198 031 04720	4.7kΩ 5% 0402
3HRP	3198 031 04790	47Ω 5% 0402
3HRR	2322 705 70279	27Ω 5% 0402
3HRS	2322 705 70279	27Ω 5% 0402
3HRT	3198 031 04790	47Ω 5% 0402
3HRU	2322 705 70279	27Ω 5% 0402
3HRV	3198 031 04790	47Ω 5% 0402
3HRW	2322 705 70279	27Ω 5% 0402
3HRY	3198 031 04790	47Ω 5% 0402
3HRZ	2322 705 70279	27Ω 5% 0402
3HS0	3198 031 04790	47Ω 5% 0402
3HS1	2322 705 70279	27Ω 5% 0402
3HS2	3198 031 04790	47Ω 5% 0402
3HS3	3198 031 03910	390Ω 1% 0402
3HS4	3198 031 03910	390Ω 1% 0402
3HS5	3198 031 04720	4.7kΩ 5% 0402
3HS6	3198 031 07590	75Ω 5% 0402
3HS7	3198 031 07590	75Ω 5% 0402
3HS8	3198 031 02210	220Ω 5% 0402
3HS9	3198 031 01010	1Ω 5% 0402
3HSA	3198 031 04790	47Ω 5% 0402
3HSC	3198 031 02230	22kΩ 5% 0402
3HSD	3198 031 04790	47Ω 5% 0402
3HSH	2322 705 70279	27Ω 5% 0402
3HSJ	3198 031 04790	47Ω 5% 0402
3HSK	2322 705 70279	27Ω 5% 0402
3HSL	3198 031 04790	47Ω 5% 0402
3HSM	2322 705 70279	27Ω 5% 0402
3HSN	3198 031 04790	47Ω 5% 0402
3HSQ	3198 031 90010	Jumper 0402
3HST	3198 031 01010	1Ω 5% 0402
3HSU	3198 031 04790	47Ω 5% 0402
3HSV	3198 031 02210	220Ω 5% 0402
3HSZ	3198 031 90010	Jumper 0402
3HT1	3198 031 90010	Jumper 0402
3HT3	3198 031 04790	47Ω 5% 0402
3HT4	2322 705 70279	27Ω 5% 0402
3HT5	3198 031 90010	Jumper 0402
3HT7	3198 031 03390	33Ω 1% 0402
3HT8	3198 031 03390	33Ω 1% 0402
3HT9	3198 031 04720	4.7kΩ 5% 0402
3HV3	3198 031 02230	22kΩ 5% 0402
3HV4	3198 031 02230	22kΩ 5% 0402
3HV7	3198 031 02230	22kΩ 5% 0402
3HV8	3198 031 02230	22kΩ 5% 0402
3HVN	3198 031 03390	33Ω 1% 0402
3HVP	3198 031 03390	33Ω 1% 0402
3HVR	3198 031 03390	33Ω 1% 0402
3HVS	3198 031 03390	33Ω 1% 0402
3HVT	3198 031 01230	12kΩ 5% 0402
3HVW	3198 031 02230	22kΩ 5% 0402
3HVX	3198 031 02230	22kΩ 5% 0402
3HVY	3198 031 04730	47Ω 5% 0402
3HW0	3198 035 21030	10nF 16V 0402
3HWK	3198 031 04720	4.7kΩ 5% 0402
3HWM	3198 031 03390	33Ω 1% 0402
3HWN	3198 031 03390	33Ω 1% 0402
3HWP	3198 031 03390	33Ω 1% 0402
3HWR	3198 031 03390	33Ω 1% 0402
3HWS	3198 031 03390	33Ω 1% 0402
3HWT	3198 031 03390	33Ω 1% 0402
3HWU	3198 031 03390	33Ω 1% 0402
3HWV	3198 031 03390	33Ω 1% 0402
3HWW	3198 031 03390	33Ω 1% 0402
3HWY	3198 031 03390	33Ω 1% 0402
3HWZ	3198 031 03390	33Ω 1% 0402
3J09	3198 031 01010	1Ω 5% 0402
3J11	3198 031 01010	1Ω 5% 0402
3J12	3198 031 01010	1Ω 5% 0402
3J13	3198 031 90010	Jumper 0402
3J14	3198 031 01040	100kΩ 5% 0402
3J15	3198 031 01010	1Ω 5% 0402
3J16	3198 031 01040	100kΩ 5% 0402
3J17	3198 031 01010	1Ω 5% 0402
3J18	3198 031 01040	100kΩ 5% 0402
3J20	3198 031 01030	10kΩ 5% 0402
3J21	3198 031 01040	100kΩ 5% 0402
3J22	3198 031 01030	10kΩ 5% 0402
3J23	3198 031 01030	10kΩ 5% 0402
3J24	3198 031 01040	100kΩ 5% 0402
3J29	3198 031 01010	1Ω 5% 0402
3J30	2120 108 94136	Fuse 2.2Ω 5% 1206
3J31	3198 031 02230	22kΩ 5% 0402
3J32	3198 031 07590	75Ω 5% 0402
3J33	3198 031 04730	47Ω 5% 0402
3J34	3198 031 06890	68Ω 5% 0402
3J35	3198 031 02210	220Ω 5% 0402
3J36	3198 031 01210	120Ω 5% 0.01W 0402
3J50	3198 031 01010	1Ω 5% 0402
3J51	3198 031 01510	150Ω 5% 0.01W 0402
3J53	3198 031 01020	1kΩ 5% 0402
3J54	3198 031 01040	100kΩ 5% 0402
3J57	3198 031 01010	1Ω 5% 0402
3J58	3198 031 01510	150Ω 5% 0.01W 0402
3J59	3198 031 01020	1kΩ 5% 0402
3J60	3198 031 01040	100kΩ 5% 0402
3JA0	3198 031 01010	1Ω 5% 0402
3JA1	3198 031 01010	1Ω 5% 0402
3JA4	3198 031 01030	10kΩ 5% 0402
3JA5	3198 031 04730	47Ω 5% 0402
3JA6	3198 031 04730	47Ω 5% 0402
3JA7	3198 031 01010	1Ω 5% 0402
3JA8	3198 031 01010	1Ω 5% 0402
3JA9	3198 031 01020	1kΩ 5% 0402
3JB0	3198 031 01010	1Ω 5% 0402

3JB3	3198 031 01030	10kΩ 5% 0402
3JB4	3198 031 04730	47Ω 5% 0402
3JB5	3198 031 04730	47Ω 5% 0402
3JB6	3198 031 01010	1Ω 5% 0402
3JB7	3198 031 02290	22Ω 5% 0.1W 0402
3JB8	3198 031 01030	10kΩ 5% 0402
3JC0	3198 031 01010	1Ω 5% 0402
3JC1	3198 031 02290	22Ω 5% 0.1W 0402
3JC2	3198 031 01030	10kΩ 5% 0402
3JC3	3198 031 01020	1kΩ 5% 0402
3JC5	3198 031 01010	1Ω 5% 0402
3JC7	3198 031 04720	4.7kΩ 5% 0402
3JC8	3198 031 04720	4.7kΩ 5% 0402
3JE0	3198 031 01010	1Ω 5% 0402
3JE1	3198 031 01010	1Ω 5% 0402
3JE2	3198 031 01010	1Ω 5% 0402
3JE3	3198 031 01010	1Ω 5% 0402
3JE4	3198 031 01010	1Ω 5% 0402
3JE5	3198 031 01010	1Ω 5% 0402
3JG1	3198 031 01030	10kΩ 5% 0402
3JG2	3198 031 04730	47Ω 5% 0402
3JG3	3198 031 04730	47Ω 5% 0402
3JG4	3198 035 21030	10nF 16V 0402
3JG5	3198 031 01010	1Ω 5% 0402
3JG6	3198 031 01010	1Ω 5% 0402
3JG7	3198 031 01010	1Ω 5% 0402
3JG8	3198 031 02290	22Ω 5% 0.1W 0402
3JG9	3198 031 01030	10kΩ 5% 0402
3JH1	3198 031 01020	1kΩ 5% 0402
3JH3	3198 031 04720	4.7kΩ 5% 0402
3JH4	3198 031 90010	Jumper 0402
3JH5	2322 705 70184	180Ω 5% 0402
3JH6	3198 031 01010	1Ω 5% 0402
3N01	3198 031 01030	10kΩ 5% 0402
3N03	2322 706 71103	11kΩ 1% 0402
3N04	3198 031 01030	10kΩ 5% 0402
3N10	3198 031 04720	4.7kΩ 5% 0402
3N13	3198 031 01010	1Ω 5% 0402
3N14	3198 031 01530	15kΩ 5% 0.01W 0402
3N15	3198 031 01530	15kΩ 5% 0.01W 0402
3N16	3198 031 01530	15kΩ 5% 0.01W 0402
3N17	3198 031 01530	15kΩ 5% 0.01W 0402
3N18	3198 031 01030	10kΩ 5% 0402
3N19	3198 031 01030	10kΩ 5% 0402
3N20	3198 031 01030	10kΩ 5% 0402
3N51	3198 031 01010	1Ω 5% 0402
3N52	3198 031 01010	1Ω 5% 0402
3N53	3198 031 01010	1Ω 5% 0402
3N54	3198 031 01010	1Ω 5% 0402
3N56	3198 031 01090	10Ω 5% 0.01W 0402
3T05	3198 031 01030	10kΩ 5% 0402
3T07	3198 031 03310	330Ω 5% 0402
3T08	3198 031 03310	330Ω 5% 0402
3T09	3198 031 03390	33Ω 1% 0402
3T10	3198 031 04720	4.7kΩ 5% 0402
3T11	3198 031 04720	4.7kΩ 5% 0402
3T12	2322 705 87189	18Ω 5% 0402
3T13	2322 705 87189	18Ω 5% 0402
3T14	3198 031 03390	33Ω 1% 0402
3T15	3198 031 03320	3.3kΩ 5% 0402
3T16	3198 031 03320	3.3kΩ 5% 0402
3T17	3198 031 01020	1kΩ 5% 0402
3T18	3198 031 01010	1Ω 5% 0402
3T19	3198 031 03910	390Ω 1% 0402
3T20	3198 031 01010	1Ω 5% 0402
3T21	3198 031 03390	33Ω 1% 0402
3T22	3198 031 03390	33Ω 1% 0402
3T23	3198 031 03390	33Ω 1% 0402
3T24	3198 031 03390	33Ω 1% 0402
3T25	3198 031 01020	1kΩ 5% 0402
3T29	3198 031 03910	390Ω 1% 0402
3T30	3198 031 03320	3.3kΩ 5% 0402
3T31	3198 031 03320	3.3kΩ 5% 0402
3T32	3198 031 03320	3.3kΩ 5% 0402
3T33	3198 031 03320	3.3kΩ 5% 0402
3T34	3198 031 03320	3.3kΩ 5% 0402
3T35	3198 031 03320	3.3kΩ 5% 0402
3T36	3198 031 03320	3.3kΩ 5% 0402
3T37	3198 031 01010	1Ω 5% 0402
3T38	3198 031 01010	1Ω 5% 0402
3T40	3198 031 03390	33Ω 1% 0402
3T41	3198 031 03390	33Ω 1% 0402
3T42	3198 031 03390	33Ω 1% 0402
3T43	3198 031 03390	33Ω 1% 0402
3T44	3198 031 03390	33Ω 1% 0402
3T45	3198 031 03390	33Ω 1% 0402
3T46	3198 031 03390	33Ω 1% 0402
3T47	3198 031 03390	33Ω 1% 0402
3T48	3198 031 04720	4.7kΩ 5% 0402
3T53	3198 031 04790	47Ω 5% 0402
3T54	3198 031 03310	330Ω 5% 0402
3T55	3198 031 08220	8.2kΩ 5% 0.5W
3T56	3198 031 01010	1Ω 5% 0402
3T57	3198 031 01010	1Ω 5% 0402
3T58	3198 031 03910	390Ω 1% 0402
3T59	3198 031 03910	390Ω 1% 0402
3T68	3198 031 04720	4.7kΩ 5% 0402
3T69	3198 031 01040	100kΩ 5% 0402
3T70	3198 031 04720	4.7kΩ 5% 0402
3T74	3198 031 04710	470Ω 5% 0402
3T75	3198 031 02720	2.7kΩ 5% 0.01W 0402
3T76	3198 031 03320	3.3kΩ 5% 0402
3T77	3198 031 04790	47Ω 5% 0402
3T78	3198 031 01030	10kΩ 5% 0402
3T80	3198 031 01030	10kΩ 5% 0402
3T81	3198 031 01520	1.2kΩ 5% 0.01W 0402
3T82	3198 031 02210	220Ω 5% 0402
3T83	3198 031 06890	68Ω 5% 0402
3T84	3198 031 02210	220Ω 5% 0402
3T86	3198 031 04710	470Ω 5% 0402
3T87	3198 031 02220	2.2kΩ 5% 0402
3T88	3198 031 02220	2.2kΩ 5% 0402
3T89	3198 031 03320	3.3kΩ 5% 0402
3T90	3198 031 01020	1kΩ 5% 0402
3T91	3198 031 01040	100kΩ 5% 0402
3T92	3198 031 01030	10kΩ 5% 0402
3T93	3198 031 01020	1kΩ 5% 0402
3T94	3198 031 01030	10kΩ 5% 0402
3T95	3198 031 01040	100kΩ 5% 0402
3U00	3198 031 01030	10kΩ 5% 0402
3U01	2322 750 61009	Fuse 10Ω 5% 1206
3U02	3198 031 01030	10kΩ 5% 0402
3U04	3198 031 01050	1MΩ 5% 0402
3U05	3198 031 01030	10kΩ 5% 0402
3U06	3198 031 02290	22Ω 5% 0.1W 0402
3U07	3198 031 01010	1Ω 5% 0402
3U08	3198 031 02290	22Ω 5% 0.1W 0402
3U09	2322 706 71002	1kΩ 1% 0402
3U10	3198 031 01020	1kΩ 5% 0402
3U11	3198 031 90010	Jumper 0402
3U12	3198 031 01030	10kΩ 5% 0402
3U13	3198 031 01030	10kΩ 5% 0402
3U14	3198 031 02230	22kΩ 5% 0402
3U15	3198 031 04780	4.7Ω 5% 0402
3U17	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U18	3198 031 02210	220Ω 5% 0402
3U20	3198 031 02290	22Ω 5% 0.1W 0402
3U21	3198 031 04730	47Ω 5% 0402
3U23	3198 031 04780	4.7Ω 5% 0402
3U24	3198 031 01020	1kΩ 5% 0402
3U25	3198 031 02230	22kΩ 5% 0402
3U26	3198 031 03320	3.3kΩ 5% 0402
3U27	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U29	3198 031 04730	47Ω 5% 0402
3U30	3198 031 03310	330Ω 5% 0402
3U31	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U32	3198 031 03930	39kΩ 5% 0402
3U33	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U34	3198 031 03330	33kΩ 5% 0402
3U36	3198 031 01020	1kΩ 5% 0402
3U37	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U38	3198 031 03330	33kΩ 5% 0402
3U40	3198 031 03320	3.3kΩ 5% 0402
3U41	3198 031 01010	1Ω 5% 0402
3U42	3198 031 02220	2.2kΩ 5% 0402
3U43	3198 031 03320	3.3kΩ 5% 0402
3U44	3198 031 01030	10kΩ 5% 0402
3U45	3198 031 06890	68Ω 5% 0402
3U46	3198 031 02290	22Ω 5% 0.1W 0402
3U47	2322 706 71201	120Ω 1% 0402
3U48	3198 031 06890	68Ω 5% 0402
3U49	3198 031 01020	1kΩ 5% 0402
3U50	3198 031 01020	1kΩ 5% 0402
3U51	2322 706 75601	560Ω 1% 0402
3U52	3198 031 01020	1kΩ 5% 0402
3U55	3198 031 06820	6.8kΩ 5% 0.01W 0402
3U56	2322 706 72201	220Ω 1% 0402
3U57	2322 706 76809	68Ω 1% 0402 RC32
3U58	3198 031 01030	10kΩ 5% 0402
3U59	3198 031 03320	3.3kΩ 5% 0402
3U60	3198 031 01040	100kΩ 5% 0402
3U61	3198 031 01030	10kΩ 5% 0402
3U62	3198 031 04710	470Ω 5% 0402
3U63	3198 031 01020	1kΩ 5% 0402
3U64	3198 031 02220	2.2kΩ 5% 0402
3U69	2322 706 71002	1kΩ 1% 0402
3U70	2322 706 71002	1kΩ 1% 0402
3U74	2322 706 74701	470Ω 1% 0402
3U75	2322 706 74702	4.7kΩ 5% 0402
3U76	3198 031 02210	220Ω 5% 0402
3U77	2322 706 71201	120Ω 1% 0402
3U78	3198 031 02230	22kΩ 5% 0402
3U79	3198 031 01040	100kΩ 5% 0402
3U80	3198 031 02240	220kΩ 5% 0.1W 0402
3U81	3198 031 01040	100kΩ 5% 0402
3U82	3198 031 01040	100kΩ 5% 0402
3U83	3198 031 01040	100kΩ 5% 0402
3U84	3198 031 01040	100kΩ 5% 0402
3U85	3198 031 01020	1kΩ 5% 0402
3U86	2322 762 60479	47Ω 5% 2512
3U87	3198 031 03310	330Ω 5% 0402
3U88	2322 706 71002	1kΩ 1% 0402
3U89	3198 031 02220	2.2kΩ 5% 0402
3U90	2322 762 60479	47Ω 5% 2512
3U91	3198 031 01020	1kΩ 5% 0402
3U92	2322 762 60479	47Ω 5% 2512
3U94	2120 108 94132	1Ω 1206
3UA1	3198 031 04710	470Ω 5% 0402
3UA2	3198 031 02290	22Ω 5% 0.1W 0402
3UA3	3198 031 02290	22Ω 5% 0.1W 0402
3UA4	3198 031 02290	22Ω 5% 0.1W 0402
3UA5	3198 031 04780	4.7Ω 5% 0402
3UA6	3198 031 04780	4.7Ω 5% 0402
3UA7	3198 031 90010	Jumper 0402
3UA8	3198 031 90010	Jumper 0402
3UA9	3198 031 02290	22Ω 5% 0.1W 0402
3u39	3198 031 90010	Jumper 0402
9B06	3198 021 90020	Jumper 0805
9B10	3198 031 90010	Jumper 0402
9B11	3198 031 90010	Jumper 0402
9D02	2422 549 43769	Bead 30Ω at 100MHz
9D03	2422 549 43769	Bead 30Ω at 100MHz
9D04	2422 549 43769	Bead 30Ω at 100MHz
9D05	2422 549 43769	Bead 30Ω at 100MHz
9E10	3198 031 90010	Jumper 0402
9E11	3198 031 90010	Jumper 0402
9E12	3198 031 90010	Jumper 0402
9E70	3198 031 90010	Jumper 0402
9E72	3198 031 90010	Jumper 0402
9E73	3198 031 90010	Jumper 0402
9E90	3198 031 90010	Jumper 0402
9E91	3198 031 90010	Jumper 0402
9F50	3198 031 90010	Jumper 0402
9F51	3198 031 90010	Jumper 0402
9F93	3198 031 90010	Jumper 0402
9F94	3198 031 90010	Jumper 0402
9FA1	3198 031 90010	Jumper 0402
9G49	3198 031 90010	Jumper 0402
9G53	3198 031 90010	Jumper 0402
9G54	3198 031 90010	Jumper 0402
9G55	3198 031 90010	Jumper 0402
9G77	3198 021 90020	Jumper 0805
9G78	3198 021 90020	Jumper 0805
9H05	3198 031 90010	Jumper 0402
9H06	3198 031 90010	Jumper 0402
9H09	3198 031 90010	Jumper 0402
9H10	3198 031 90010	Jumper 0402
9H20	3198 031 90010	Jumper 0402
9H21	3198 031 90010	Jumper 0402
9H22	3198 031 90010	Jumper 0402
9H23	3198 031 90010	Jumper 0402
9H24	3198 031 90010	Jumper 0402
9H25	3198 031 90010	Jumper 0402
9H26	3198 031 90010	Jumper 0402
9H27	3198 031 90010	Jumper 0402
9H28	3198 031 90010	Jumper 0402
9H29	3198 031 90010	Jumper 0402
9H30	3198 031 90010	Jumper 0402
9H31	3198 031 90010	Jumper 0402
9H32	3198 031 90010	Jumper 0402
9H33	3198 031 90010	Jumper 0402
9H34	3198 031 90010	Jumper 0402
9H35	3198 031 90010	Jumper 0402
9H36	3198 031 90010	Jumper 0402
9H37	3198 031 90010	Jumper 0402
9H40	3198 031 90010	Jumper 0402
9H41	3198 031 90010	Jumper 0402
9H42	3198 031 90010	Jumper 0402
9HC0	3198 031 90010	Jumper 0402
9HD0	3198 031 90010	Jumper 0402
9HF4	3198 031 90010	Jumper 0402
9HF5	3198 031 90010	Jumper 0402
9HF6	3198 031 90010	Jumper 0402
9HF7	3198 031 90010	Jumper 0402
9HF8	3198 031 90010	Jumper 0402
9HG0	3198 031 90010	Jumper 0402
9HG1	3198 031 90010	Jumper 0402
9HM1	3198 031 90010	Jumper 0402
9HM2	3198 031 90010	Jumper 0402
9HP5	3198 031 90010	Jumper 0402
9HP6	3198 031 90010	Jumper 0402
9HP7	3198 031 90010	Jumper 0402
9HP8	3198 031 90010	Jumper 0402
9HP9	3198 031 90010	Jumper 0402
9HW3	3198 031 04790	47Ω 5% 0402
9HW4	3198 031 04790	47Ω 5% 0402
9HW5	3198 031 04790	47Ω 5% 0402
9HW6	3198 031 04790	47Ω 5% 0402
9HW7	3198 031 04790	47Ω 5% 0402
9HW8	3198 031 04790	47Ω 5% 0402
9HW9	3198 031 04790	47Ω 5% 0402
9HWA	3198 031 04790	47Ω 5% 0402

9HWB	3198 031 04790	47Ω 5% 0402
9HWC	3198 031 04790	47Ω 5% 0402
9HWD	3198 031 04790	47Ω 5% 0402
9HWE	3198 031 90010	Jumper 0402
9HWF	3198 031 90010	Jumper 0402
9HWG	3198 031 90010	Jumper 0402
9HWH	3198 031 90010	Jumper 0402
9HWJ	3198 031 04790	47Ω 5% 0402
9HWK	3198 031 04790	47Ω 5% 0402
9HWM	3198 031 04790	47Ω 5% 0402
9HWN	3198 031 04790	47Ω 5% 0402
9HWP	3198 031 04790	47Ω 5% 0402
9HWR	3198 031 04790	47Ω 5% 0402
9HWS	3198 031 04790	47Ω 5% 0402
9HWT	3198 031 04790	47Ω 5% 0402
9HWU	3198 031 04790	47Ω 5% 0402
9HWV	3198 031 04790	47Ω 5% 0402
9HWW	3198 031 04790	47Ω 5% 0402
9HWY	3198 031 04790	47Ω 5% 0402
9HWZ	3198 031 04790	47Ω 5% 0402
9J01	3198 031 90010	Jumper 0402
9J02	3198 031 90010	Jumper 0402
9J03	3198 031 90010	Jumper 0402
9J04	3198 031 90010	Jumper 0402
9J05	3198 031 90010	Jumper 0402
9J06	3198 031 90010	Jumper 0402
9J07	3198 031 90010	Jumper 0402
9JA0	3198 031 90010	Jumper 0402
9JA1	3198 031 90010	Jumper 0402
9JA2	3198 031 90010	Jumper 0402
9JA3	3198 031 90010	Jumper 0402
9JA4	3198 031 90010	Jumper 0402
9JA5	3198 031 90010	Jumper 0402
9JA6	3198 031 90010	Jumper 0402
9JA7	3198 031 90010	Jumper 0402
9JE5	3198 031 90010	Jumper 0402
9JE6	3198 031 90010	Jumper 0402
9JE8	3198 031 90010	Jumper 0402
9JE9	3198 031 90010	Jumper 0402
9JF0	3198 031 90010	Jumper 0402
9N01	3198 031 90010	Jumper 0402
9N02	3198 031 90010	Jumper 0402
9N04	3198 021 90030	Jumper 0603
9N10	3198 031 90010	Jumper 0402
9N50	3198 031 90010	Jumper 0402
9T11	3198 031 01030	10kΩ 5% 0402
9T12	3198 031 01030	10kΩ 5% 0402
9T14	3198 031 90010	Jumper 0402
9T15	3198 021 90020	Jumper 0805
9T16	3198 021 90020	Jumper 0805
9T51	3198 031 90010	Jumper 0402
9T52	3198 031 90010	Jumper 0402
9T57	3198 031 90010	Jumper 0402
9T60	3198 031 90010	Jumper 0402
9T62	3198 031 90010	Jumper 0402
9T85	3198 031 90010	Jumper 0402
9T86	3198 031 90010	Jumper 0402
9U03	3198 031 90010	Jumper 0402

5B00	2422 549 01459	Mains Filter UF2327L
5B01	2422 531 00154	Trafo BS28603-00
5B10	3198 018 90030	120Ω 100MHz 0603
5B11	3198 018 90030	120Ω 100MHz 0603
5B12	3198 018 90030	120Ω 100MHz 0603
5B13	3198 018 90030	120Ω 100MHz 0603
5B14	3198 018 90030	120Ω 100MHz 0603
5D00	2422 536 00587	22µH 10%
5D01	2422 549 43769	Bead 30Ω at 100MHz
5D02	2422 549 43769	Bead 30Ω at 100MHz
5D03	2422 549 43769	Bead 30Ω at 100MHz
5D04	2422 549 43769	Bead 30Ω at 100MHz
5D05	2422 549 44197	Bead 220Ω at 100MHz
5D07	2422 536 00587	22µH 10%
5D10	2422 549 44197	Bead 220Ω at 100MHz
5D11	2422 549 44197	Bead 220Ω at 100MHz
5E01	2422 549 43769	Bead 30Ω at 100MHz
5E02	2422 549 43769	Bead 30Ω at 100MHz
5FA1	2422 549 43769	Bead 30Ω at 100MHz
5FA2	2422 549 44197	Bead 220Ω at 100MHz
5FA6	2422 549 43769	Bead 30Ω at 100MHz
5FA7	2422 549 43769	Bead 30Ω at 100MHz
5FA8	2422 549 43769	Bead 30Ω at 100MHz
5FB1	2422 549 44197	Bead 220Ω at 100MHz
5FB2	2422 549 44197	Bead 220Ω at 100MHz
5G00	2422 549 45325	Bead 67Ω at 100MHz
5G01	2422 549 45325	Bead 67Ω at 100MHz
5G02	2422 549 45325	Bead 67Ω at 100MHz
5G03	2422 549 45325	Bead 67Ω at 100MHz
5G04	2422 549 45325	Bead 67Ω at 100MHz
5G05	2422 549 45325	Bead 67Ω at 100MHz
5G06	2422 549 45325	Bead 67Ω at 100MHz
5G07	2422 549 45325	Bead 67Ω at 100MHz
5G08	2422 549 45325	Bead 67Ω at 100MHz
5G09	2422 549 45325	Bead 67Ω at 100MHz
5G10	2422 549 45325	Bead 67Ω at 100MHz
5G11	2422 549 45325	Bead 67Ω at 100MHz
5G55	2422 549 44197	Bead 220Ω at 100MHz
5G56	2422 549 44197	Bead 220Ω at 100MHz
5GE0	3198 018 90030	120Ω 100MHz 0603
5GE1	3198 018 90030	120Ω 100MHz 0603
5GE2	3198 018 90030	120Ω 100MHz 0603
5GE3	2422 549 44197	Bead 220Ω at 100MHz
5GE4	2422 549 44197	Bead 220Ω at 100MHz
5GE5	2422 549 44197	Bead 220Ω at 100MHz
5GE6	2422 549 44197	Bead 220Ω at 100MHz
5HA0	2422 549 43769	Bead 30Ω at 100MHz
5HG0	2422 549 43769	Bead 30Ω at 100MHz
5HG1	2422 549 43769	Bead 30Ω at 100MHz
5HK0	2422 549 43769	Bead 30Ω at 100MHz
5HK1	3198 018 90070	Bead 120Ω at 100MHz
5HK2	3198 018 90070	Bead 120Ω at 100MHz
5HK3	3198 018 90070	Bead 120Ω at 100MHz
5HK4	2422 549 43769	Bead 30Ω at 100MHz
5HM0	2422 549 44197	Bead 220Ω at 100MHz
5HM1	2422 549 44197	Bead 220Ω at 100MHz
5HP1	2422 549 43769	Bead 30Ω at 100MHz
5HP2	2422 549 43769	Bead 30Ω at 100MHz
5HR0	3198 018 53370	0.33µH 10% 0603
5HR1	3198 018 51080	1µH 10% 0603
5HR2	3198 018 53370	0.33µH 10% 0603
5HR3	3198 018 53370	0.33µH 10% 0603
5HR4	3198 018 51080	1µH 10% 0603
5HR5	3198 018 53370	0.33µH 10% 0603
5HR6	2422 549 43769	Bead 30Ω at 100MHz
5HR7	2422 549 43769	Bead 30Ω at 100MHz
5HR8	3198 018 52280	2.2µH 10% 0603
5HRC	3198 018 53370	0.33µH 10% 0603
5HRD	3198 018 51070	0.1µH 10% 0603
5HRE	3198 018 51080	1µH 10% 0603
5HRF	3198 018 51070	0.1µH 10% 0603
5HRG	3198 018 53370	0.33µH 10% 0603
5HRH	3198 018 51070	0.1µH 10% 0603
5HRM	3198 018 54770	0.47µH 10% 0603
5HRN	3198 018 52280	2.2µH 10% 0603
5HRP	3198 018 54770	0.47µH 10% 0603
5HRU	3198 018 51080	1µH 10% 0603
5HRW	3198 018 51070	0.1µH 10% 0603
5HRZ	2422 549 43769	Bead 30Ω at 100MHz
5HV0	2422 549 43769	Bead 30Ω at 100MHz
5HY0	2422 549 43769	Bead 30Ω at 100MHz
5HY1	2422 549 44197	Bead 220Ω at 100MHz
5HY2	2422 549 43769	Bead 30Ω at 100MHz
5HY3	2422 549 43769	Bead 30Ω at 100MHz
5HY4	2422 549 43769	Bead 30Ω at 100MHz
5HY5	2422 549 43769	Bead 30Ω at 100MHz
5HY6	2422 549 43769	Bead 30Ω at 100MHz
5HY7	2422 549 43769	Bead 30Ω at 100MHz
5HY8	2422 549 43769	Bead 30Ω at 100MHz
5HY9	2422 549 43769	Bead 30Ω at 100MHz
5HYA	2422 549 44197	Bead 220Ω at 100MHz
5J40	2422 549 43769	Bead 30Ω at 100MHz
5J42	2422 549 43769	Bead 30Ω at 100MHz
5J45	2422 549 43769	Bead 30Ω at 100MHz
5JA1	2422 549 43769	Bead 30Ω at 100MHz
5JA2	2422 549 43769	Bead 30Ω at 100MHz
5JA3	2422 549 44197	Bead 220Ω at 100MHz
5JA4	2422 549 44197	Bead 220Ω at 100MHz
5JA5	2422 549 44197	Bead 220Ω at 100MHz
5N00	2422 549 43769	Bead 30Ω at 100MHz
5N01	2422 549 43769	Bead 30Ω at 100MHz
5N02	2422 549 43769	Bead 30Ω at 100MHz
5N03	2422 549 43769	Bead 30Ω at 100MHz
5N04	2422 549 43769	Bead 30Ω at 100MHz
5N30	2422 549 44197	Bead 220Ω at 100MHz
5N31	3198 018 53380	3.3µH 10% 0603
5T02	2422 549 44197	Bead 220Ω at 100MHz
5T09	2422 536 01389	2.7µH 5% 1008
5T31	2422 549 44197	Bead 220Ω at 100MHz
5T32	2422 549 44197	Bead 220Ω at 100MHz
5T53	2422 549 44197	Bead 220Ω at 100MHz
5T54	2422 549 44197	Bead 220Ω at 100MHz
5T60	3198 018 61580	1.5µH 5%
5T61	3198 018 32770	0.27µH 10% 0805
5U00	2422 536 00779	10µH 20%
5U01	2422 536 00671	10µH 20%
5U02	2422 536 00671	10µH 20%
5U03	2422 536 00779	10µH 20%

6B02	9340 548 53115	PDZ5.6B
6B03	3198 020 51890	BZX384-C18
6B04	9338 118 70682	Bridge DF06M-E3
6B05	3198 010 10730	SS36
6B06	9322 202 76687	BYW29-200-E3
6B07	9322 085 69668	MBRS1100
6B08	9322 085 69668	MBRS1100
6B09	9322 208 44685	BZG05C6V8
6B10	9322 208 80685	BZG05C15
6B11	9322 203 84685	RS1D-E3
6B13	9340 548 53115	PDZ5.6B
6B14	9340 548 53115	PDZ5.6B
6B15	3198 020 55680	BZX384-C5V6
6D15	3198 010 10630	BAS316
6D62	3198 020 51890	BZX384-C18
6D63	3198 010 10630	BAS316
6E07	9340 548 55115	PDZ6.8B
6E08	9340 548 55115	PDZ6.8B
6E09	9340 548 55115	PDZ6.8B
6E10	3198 010 10750	BAV99W
6E11	3198 010 10750	BAV99W
6E12	9340 548 55115	PDZ6.8B
6E13	9340 548 55115	PDZ6.8B
6E14	3198 010 10750	BAV99W
6E15	3198 010 10750	BAV99W
6E16	9340 548 55115	PDZ6.8B
6E17	9340 548 55115	PDZ6.8B
6E18	3198 010 10750	BAV99W
6E19	3198 010 10750	BAV99W
6E20	9340 548 55115	PDZ6.8B
6E21	9340 548 55115	PDZ6.8B
6E23	9340 548 55115	PDZ6.8B
6E28	9340 548 55115	PDZ6.8B
6E29	9340 548 55115	PDZ6.8B
6E30	9340 548 55115	PDZ6.8B
6E31	9340 548 55115	PDZ6.8B
6E33	9340 548 55115	PDZ6.8B
6E35	9340 548 55115	PDZ6.8B
6E36	9340 548 55115	PDZ6.8B
6E37	9340 548 55115	PDZ6.8B
6E38	9340 548 55115	PDZ6.8B
6E39	9340 548 55115	PDZ6.8B
6E40	9340 548 55115	PDZ6.8B
6FA0	9322 134 46685	SML-310MT
6FA1	9322 134 46685	SML-310MT
6FA2	9322 134 46685	SML-310MT
6FA3	9322 134 46685	SML-310MT
6FA4	9322 134 46685	SML-310MT
6FA5	9322 134 46685	SML-310MT
6G50	3198 020 55680	BZX384-C5V6
6G51	9322 134 46685	SML-310MT
6GE6	9322 165 17668	STPS2L30A
6GE7	9322 165 17668	STPS2L30A
6H00	3198 010 10630	BAS316
6H01	3198 010 10630	BAS316
6HD0	3198 010 10630	BAS316
6HD1	3198 010 10630	BAS316
6HF0	9322 134 46685	SML-310MT
6HW0	3198 010 10630	BAS316
6HW1	3198 010 10630	BAS316
6J10	3198 010 10630	BAS316
6J12	3198 010 10630	BAS316
6J15	9340 548 55115	PDZ6.8B
6J16	9340 548 55115	PDZ6.8B
6J17	9340 548 55115	PDZ6.8B
6J18	9340 548 55115	PDZ6.8B
6J30	3198 010 10630	BAS316
6J31	3198 010 10630	BAS316
6J40	9340 548 55115	PDZ6.8B
6J41	9340 548 55115	PDZ6.8B
6J42	9340 548 55115	PDZ6.8B
6J43	9340 548 55115	PDZ6.8B
6J44	9340 548 55115	PDZ6.8B
6J45	9340 548 55115	PDZ6.8B
6J46	9340 548 55115	PDZ6.8B
6J47	9340 548 55115	PDZ6.8B
6JA1	3198 010 10630	BAS316
6JA2	3198 010 10630	BAS316
6JA3	3198 010 10630	BAS316
6JA4	3198 010 10630	BAS316
6U00	3198 010 10630	BAS316
6U01	9340 548 61115	PDZ12B
6U02	3198 020 51290	BZX384-C12
6U04	3198 010 10630	BAS316
6U05	3198 020 56880	BZX384-C6V8
6U06	3198 010 10630	BAS316
6U07	9322 165 17668	STPS2L30A
6U08	9340 548 65115	PDZ18B
6U09	9322 165 17668	STPS2L30A
6U10	9340 548 58115	PDZ9.1B

7B00	3198 010 44340	BC817-25W
7B01	3198 010 42320	BC857BW
7B02	3198 010 42320	BC857BW
7B04	9322 149 04682	TCET1102

7B05	9322 194 29687	Pow FET STP5NK60ZFP
7B06	9340 575 87118	PHD38N02LT
7B07	9322 192 16685	TS2431AI
7B50	9340 425 30115	BC847BPN
7D00	9322 213 35668	LM339P
7D02	9340 425 30115	BC847BPN
7D05	3198 010 42310	BC847BW
7D06	3198 010 44350	BC807-25W
7D09	3198 010 44340	BC817-25W
7D10	9322 194 73668	SI4532ADY-E3
7D30	3198 010 42310	BC847BW
7D31	3198 010 44350	BC807-25W
7D32	9340 425 30115	BC847BPN
7D34	3198 010 44340	BC817-25W
7D35	9322 194 73668	SI4532ADY-E3
7D55	3198 010 44350	BC807-25W
7D58	9340 425 30115	BC847BPN
7D59	3198 010 42310	BC847BW
7D61	3198 010 44340	BC817-25W
7D63	9340 425 30115	BC847BPN
7D64	9340 425 30115	BC847BPN
7D70	3198 010 42310	BC847BW
7F90	9322 243 97671	EP2C5F256C7N
7FA1	3198 010 42310	BC847BW
7FA3	9322 204 87668	EPCS1SI8N
7FA4	9322 247 54685	LDS3985M25
7FA5	9322 215 24668	LD1117DT12
7G54	9322 204 10685	SI3441BDV
7G55	3198 010 42310	BC847BW
7G58	9340 425 30115	BC847BPN
7G59	9340 425 20115	BC847BS
7G61	9340 425 20115	BC847BS
7G65	3198 010 42310	BC847BW
7G66	9340 425 30115	BC847BPN
7GE1	9322 206 45668	M25P05-AVMN6P
7GE2	9322 247 80671	PACIFIC3-N4
7GE3	9322 213 42685	LD3985M25
7GE5	9322 144 97668	LD1117DT
7H00	9352 835 32557	PNX8537E/M2A/0F86
7H02		For SW see item 0802
7H03	9322 204 63685	NCP303LSN10
7H04	9322 204 63685	NCP303LSN10
7H14	3198 010 42310	BC847BW
7H16	3198 010 42310	BC847BW
7H18	3198 010 42310	BC847BW
7H21	3198 010 44310	PDTC114EU
7H22	3198 010 44310	PDTC114EU
7H90	9322 204 63685	NCP303LSN10
7HA0		For SW see item 0802
7HA3	3198 010 44310	PDTC114EU
7HC0	9351 750 00118	74HC4066PW
7HC1	3198 010 44310	PDTC114EU
7HC2	3198 010 44310	PDTC114EU
7HC3		For SW see item 0802
7HC4	3198 010 42320	BC857BW
7HD0	9322 204 63685	NCP303LSN10
7HD6	9340 425 20115	BC847BS
7HD8	3198 010 42310	BC847BW
7HG0	9322 252 50668	EDE2516ACSE-6E-E
7HG1	9322 252 50668	EDE2516ACSE-6E-E
7HK0	9322 144 97668	LD1117DT
7HM1	9322 185 74668	LM324P
7HP0	9322 213 38685	LD2985BM33
7HP5	9352 760 36118	PCA9540BDP
7HV0	9322 243 46668	TPA4411RTJ
7HV1	3198 010 42310	BC847BW
7HVA	9340 425 30115	BC847BPN
7J27	9322 247 52668	AD8191ASTZ
7J28	3198 010 42310	BC847BW
7J29		For SW see item 0802
7J30	9351 875 80118	74HCU04PW
7J42	9340 425 20115	BC847BS
7J50	3198 010 42320	BC857BW
7J51	3198 010 42030	BC847B
7JA0		For SW see item 0802
7JA1		For SW see item 0802
7JA2	3198 010 42310	BC847BW
7JA3	3198 010 42310	BC847BW
7JE2	9322 174 78668	ST3232C
7JE3	3198 010 42310	BC847BW
7N00	9352 805 26518	ISP1564HL
7N30	9322 247 48668	RYC8620-2M
7T06	9340 425 30115	BC847BPN
7T18	9352 797 91557	TDA10060HL/C1
7T20	9322 160 50668	LD1117DT25
7T56	3198 010 42310	BC847BW
7T57	9352 830 76118	TDA9897HL/V2
7T59	3198 010 42310	BC847BW
7U00	9322 207 46668	NCP5422AD
7U01	9322 243 41668	SI4800BDY-E3
7U02	9322 160 70668	SI4936ADY
7U03	9322 243 41668	SI4800BDY-E3
7U04	9340 425 20115	BC847BS
7U05	9340 425 20115	BC847BS
7U06	9322 243 41668	SI4800BDY-E3
7U07	3198 010 44340	BC817-25W
7U08	9322 243 41668	SI4800BDY-E3
7U10	9340 425 10115	BC857BS
7U13	9340 425 30115	BC847BPN
7U14	9340 425 20115	BC847BS
7U15	9340 425 20115	BC847BS
7U16	9322 204 71668	SI4835BDY
7U17	9322 192 16685	TS2431AI
7U18	9322 213 50685	TS431AIL
7U19	3198 010 44340	BC817-25W
7U20	3198 010 44340	BC817-25W
7U27	9322 213 50685	TS431AIL
7U28	9340 575 87118	PHD38N02LT

Side I/O Panel [D]

Various

1301	2422 026 05133	Connector SVHS 4p f
1302	2422 026 05807	Soc. Cinch 3p f YeWhRd
1303	2422 026 05703	Socket Cinch 1p f
1304	2422 025 10655	Connector 11p m
1308	2422 033 00486	Socket USB 4p F
1309	2422 025 09406	Connector 4p m
1310	2422 025 10768	Connector 3p m

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2301	4822 126 11785	47pF 5% 50V 0603
2302	4822 126 11785	47pF 5% 50V 0603
2303	4822 122 33761	22pF 5% 50V
2304	4822 126 11785	47pF 5% 50V 0603
2305	2020 552 94427	100pF 5% 50V
2306	2020 552 94427	100pF 5% 50V
2307	2238 916 15641	22nF 10% 25V 0603
2308	2238 916 15641	22nF 10% 25V 0603
2309	5322 126 11583	10nF 10% 50V 0603
2310	5322 126 11583	10nF 10% 50V 0603
2311	4822 122 33761	22pF 5% 50V
2312	2020 004 90297	100µF 20% 16V

⊣WW⊢

3301	4822 051 30759	75Ω 5% 0.062W
3302	4822 051 30759	75Ω 5% 0.062W
3303	4822 051 30109	10Ω 5% 0.062W
3304	4822 051 30101	100Ω 5% 0.062W
3305	4822 051 30109	10Ω 5% 0.062W
3306	4822 051 30101	100Ω 5% 0.062W
3307	4822 051 30101	100Ω 5% 0.062W
3308	4822 051 30101	100Ω 5% 0.062W
3309	4822 117 13632	100kΩ 1% 0603 0.62W
3310	4822 051 30101	100Ω 5% 0.062W
3311	4822 117 13632	100kΩ 1% 0603 0.62W
3312	4822 051 30103	10kΩ 5% 0.062W
3313	4822 051 30103	10kΩ 5% 0.062W
4301	4822 051 30008	Jumper 0603
4302	4822 051 30008	Jumper 0603
4308	4822 051 30008	Jumper 0603
4309	4822 051 30008	Jumper 0603
4310	4822 051 30008	Jumper 0603
4311	4822 051 30008	Jumper 0603

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5300	2422 549 44197	Bead 220Ω at 100MHz

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6301	9322 146 61685	DF3A6.8FU
6302	9322 146 61685	DF3A6.8FU
6303	9322 146 61685	DF3A6.8FU
6304	9322 146 61685	DF3A6.8FU
6305	9322 146 61685	DF3A6.8FU
6306	9322 146 61685	DF3A6.8FU
6307	9322 146 61685	DF3A6.8FU

Keyboard & Control Panel [E]

Various

1011	4822 276 13775	Switch 1p 0.1A 12V
1012	4822 276 13775	Switch 1p 0.1A 12V
1013	4822 276 13775	Switch 1p 0.1A 12V
1014	4822 276 13775	Switch 1p 0.1A 12V
1015	4822 276 13775	Switch 1p 0.1A 12V
1016	4822 276 13775	Switch 1p 0.1A 12V
1M01	2422 025 10775	Connector 3p m

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2001	4822 126 13881	470pF 5% 50V

⊣WW⊢

3010	4822 051 30391	390Ω 5% 0.062W
3011	4822 051 30561	560Ω 5% 0.062W
3012	3198 021 31820	1.8kΩ 5% 0.062W 0603
3013	4822 051 30151	150Ω 5% 0.062W
3014	4822 117 12968	820Ω 5% 0.62W
3015	4822 051 30008	Jumper 0603
3016	4822 051 30008	Jumper 0603
3017	4822 051 30008	Jumper 0603
4001	4822 051 30008	Jumper 0603

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6011	4822 130 11564	UDZ3.9B
6012	4822 130 11564	UDZ3.9B
6014	3198 020 55680	BZX384-C5V6
6015	3198 020 55680	BZX384-C5V6
6016	3198 020 55680	BZX384-C5V6
6017	3198 020 55680	BZX384-C5V6
6018	3198 020 55680	BZX384-C5V6

AmbiLight Interface Panel [FA]

Various

1M59	2422 025 19265	Connector 5p m Bk
1M82	4822 267 10618	Connector 7p
1N59	4822 267 10637	Connector 5p
1N82	4822 267 10618	Connector 7p

IR & LED Panel [J]

Various

1M01	2422 025 10775	Connector 3p m
1M20	2422 025 10776	Connector7p m
1M20	4822 265 41343	Connector 7p m

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2001	2020 552 00134	22µF 20% 6.3V 0805
2001	3198 027 02290	Jumper 0603
2002	3198 017 41050	1µF 10V 0603
2002	3198 027 41080	1uF 6.3V 0603

⊣WW⊢

3010	3198 021 33310	330Ω 5% 0.062W 0603
3010	4822 051 30331	330Ω 5% 0.062W
3011	3198 021 36820	6.8kΩ 5% 0.062W 0603
3011	4822 051 30682	6.8Ω 5% 0.062W
3012	3198 021 36820	6.8kΩ 5% 0.062W 0603
3012	4822 051 30682	6.8Ω 5% 0.062W
3013	3198 021 38210	820Ω 5% 0.062W 0603
3013	4822 117 12968	820Ω 5% 0.62W
3014	3198 021 31030	10kΩ 5% 0.062W 0603
3014	4822 051 30103	10kΩ 5% 0.062W
3015	3198 021 31080	1Ω 5% 0603
3017	3198 021 31530	15kΩ 5% 0603
3017	4822 051 30153	15kΩ 5% 0.062W
3019	3198 021 31030	10kΩ 5% 0.062W 0603
3019	4822 051 30103	10kΩ 5% 0.062W
3020	3198 021 31030	10kΩ 5% 0.062W 0603
3020	4822 051 30103	10kΩ 5% 0.062W
4001	3198 021 90030	Jumper 0603
4001	4822 051 30008	Jumper 0603
4002	3198 021 90030	Jumper 0603
4002	4822 051 30008	Jumper 0603
4004	3198 021 90030	Jumper 0603
4004	4822 051 30008	Jumper 0603
4005	3198 021 90030	Jumper 0603
4005	4822 051 30008	Jumper 0603
4010	3198 021 90030	Jumper 0603
4010	4822 051 30008	Jumper 0603
4012	3198 021 90030	Jumper 0603
4012	4822 051 30008	Jumper 0603
4015	3198 021 90030	Jumper 0603
4015	4822 051 30008	Jumper 0603
4017	3198 021 90030	Jumper 0603
4017	4822 051 30008	Jumper 0603
4019	3198 021 90030	Jumper 0603

4019	4822 051 30008	Jumper 0603

6010	9322 243 77676	LED L-174A2PBC
6011	9322 244 07676	LED L-174A2IT-TNB5-19
6014	3198 020 53980	BZX384-C2V9
6014	4822 130 11564	UDZ3.9B



7010	9322 207 16667	TSOP34836LL1B
7010	9322 243 06671	IR Receiver
7011	3198 010 42030	BC847B
7011	5322 130 60159	BC846B
7012	3198 010 42030	BC847B
7012	5322 130 60159	BC846B
7013	9322 190 43682	BPW34
7014	3198 010 42030	BC847B
7014	5322 130 60159	BC846B

11. Revision List

Manual xxxx xxx xxxx.0

- First release.

Manual xxxx xxx xxxx.1

- **All Chapters:** 52PFL7422D/37 information added.
- **Chapter 5:** Small textual changes.
- **Chapter 10:** Spare parts list updated.

Manual xxxx xxx xxxx.2

- **All Chapters:** 47PFL9732D/37 and 52MF437B/37 information added.
- **All Chapters:** DFI panel information added.

Manual xxxx xxx xxxx.3

- **All Chapters:** 52PFL7432D/37 and 52MF437S/37 information added.
- **Chapter 5:** Some minor textchanges made.
- **Chapter 5:** correction of layout of 12nc identification of the SSB as stored in NVM.
- **Chapter 6:** 42” Supply block diagram scaled.